

ABSTRAK

Latar Belakang : Indonesia memiliki berbagai macam tanaman obat untuk mengobati nyeri. Penggunaan obat modern umumnya memiliki berbagai efek samping. Penelitian mengenai kombinasi ekstrak daun petai cina dan ekstrak daun binahong ini bertujuan untuk melihat efek analgesik tanaman tersebut.

Metode : Rancangan pada penelitian ini menggunakan post test only control group design. Subjek penelitian ini adalah 25 ekor mencit BALB/c, umur 2-3 bulan dengan berat 20-30 gram dan sudah diadaptasikan. Subjek dibagi 5 kelompok dilakukan perlakuan selama 1 minggu. Kelompok kontrol negatif diberi pakan standart, kontrol positif diberi paracetamol, perlakuan 1 diberi ekstrak daun petai cina 100%, perlakuan 2 diberi ekstrak daun binahong 100%, dan perlakuan 3 diberi kombinasi ekstrak 50% : 50%. Asam asetat sebagai penginduksi nyeri diinjeksikan secara intraperitoneal sebanyak 0,1 ml. Efek analgesik diukur dengan menghitung jumlah geliat mencit setelah 5 menit pemberian asam asetat pada hari ke delapan, diamati setiap 5 menit selama 30 menit. Hasil penelitian dianalisis menggunakan One-Way Anova dan kemudian dilanjutkan uji Post Hoc LSD (Least Significant Different).

Hasil : Uji One-Way Anova diperoleh nilai $p = 0,000$ ($p < 0,05$). Hasil pengamatan pada setiap kelompok menunjukkan bahwa total respon nyeri tertinggi hingga terendah berturut-turut adalah kelompok kontrol negatif, kelompok petai cina, kelompok kontrol positif, kelompok binahong, dan kelompok kombinasi ekstrak daun petai cina dan ekstrak daun binahong.

Kesimpulan : Penelitian ini menunjukkan bahwa kelompok perlakuan yang paling efektif ditunjukkan oleh kelompok kombinasi ekstrak daun petai cina dan ekstrak daun binahong.

Kata Kunci: efek analgesik, petai cina, binahong, kombinasi ekstrak, flavonoid, saponin, steroid

ABSTRACT

Background : *Indonesia has various medicinal plants to treat pain. The using of modern drugs generally have various side effects. The study on the combination of Leucaena Leucocephala and Heartleaf Maderavine Madevine extract is aimed to know the analgesic effects of these plants.*

Methods : *The design used in this study was post test only control group design. The subjects of this study were adapted by 25 mice BALB / c, aged 2-3 months with a weight of 20-30 grams. The subjects were divided into 5 groups and were treated for 1 week. The negative control group was given standard feed, positive control was given paracetamol, treatment 1 was given 100% Leucaena Leucocephala extract, treatment 2 was given 100% Heartleaf Maderavine Madevine extract, and treatment 3 was given a 50%: 50% extract combination. Acetic acid as a pain inducer was injected intraperitoneally as much as 0.1 ml. The analgesic effect was measured by calculating the amount of mice stretching after 5 minutes of acetic acid issue on the eighth day and observed every 5 minutes for 30 minutes. The results of this study were analysed using One-Way Anova then followed by the Post Hoc LSD (Least Significant Different) test.*

Results: *The One-Way Anova Test results obtained $p = 0,000$ ($p < 0.05$). The results of observations in each group showed that the highest to lowest pain response were negative control group, Leucaena Leucocephala group, positive control group, Heartleaf Maderavine Madevine group, and combination group of Leucaena Leucocephala extract and Heartleaf Maderavine Madevine extract.*

Conclusion: *This study showed that the most effective treatment group was shown by a group combination of Leucaena Leucocephala extract and Heartleaf Maderavine Madevine extract.*

Keywords: *Analgesic effect, Leucaena Leucocephala, Heartleaf Maderavine Madevine, extracts combination, flavonoids, saponins, steroids*