

INTISARI

Penelitian ini merupakan salah satu pengembangan penelitian yang terintegrasi mengenai uji pra klinik “formula kombinasi ekstrak herbal” yang terdiri dari ekstrak daun legundi (*Vitex trifolia*), ekstrak rimpang temulawak (*Curcuma xanthorrhiza*), ekstrak buah jeruk (*Citrus sp.*), ekstrak rimpang jahe (*Zingiber officinale*) dan ekstrak akar *Echinacea purpurea*. Formula kombinasi ekstrak herbal ini bertujuan untuk mengembangkan kegunaannya dan aktivitasnya dalam menghambat rasa nyeri.

Untuk melihat efikasi dari kelima herbal tersebut dilakukan pengujian aktivitas analgesik dengan metode geliat. Dua puluh lima ekor mencit dikelompokkan menjadi lima kelompok yaitu dosis I (245 mg/kg BB), dosis II (485 mg/kg BB), dan dosis III (970 mg/kg BB), kontrol negatif (CMC-Na 0,5%), dan kontrol positif (natrium diklofenak). Diamati respon total waktu menggeliat tiap 5 menit selama 30 menit. Data yang diperoleh dinyatakan sebagai rerata \pm SEM dalam bentuk persen analgesik. Analisis statistik dilakukan menggunakan *one-way* ANOVA. Data dianggap berbeda signifikan apabila nilai $P < 0,05$.

Hasil penelitian menunjukkan bahwa formula kombinasi ekstrak herbal yang terdiri dari ekstrak daun legundi (*Vitex trifolia*), ekstrak rimpang temulawak (*Curcuma xanthorrhiza*), ekstrak buah jeruk (*Citrus sp.*), ekstrak rimpang jahe (*Zingiber officinale*) dan ekstrak akar *Echinacea purpurea* memiliki aktivitas analgesik secara berturut-turut sebesar 34,97%, 62,88%, dan 69,63% pada mencit jantan dengan metode geliat.

Kata kunci : Analgesik, formula kombinasi ekstrak herbal, respon geliat

ABSTRACT

This research is a development of an integrated research about pre-clinical test "herbal extract combination formula" that consist of legundi's leaf extract (*Vitex trifolia*), temulawak's rhizome extract (*Curcuma xanthorrhiza*), citrus's fruit extract (*Citrus sp.*), ginger's rhizome extract (*Zingiber officinale*) and *Echinacea purpurea*'s rhizome extract that aims to develop its usefulness and activity in pain inhibition.

To see the efficacy of the five herbs combination, researcher do analgesic testing with writhing test. Twenty five male *Balb/C mice* were divided into five groups : negative control who were given CMC-Na 0,5 %, positive control who were given sodium diclofenac, and three groups were given three grade of sample dosage. The grade of sample dosages are dosage I (245 mg/kg BB), dosage II (485 mg/kg BB), and dosage III (970 mg/kg BB). Then, researcher observe the total amount of writhe every 5 minutes for 30 minutes. The data obtained were expressed as mean \pm SEM in form of analgesic percentage. Statistical analysis was performed using one-way ANOVA. Data were considered to differ significantly statistically when the $P < 0.05$.

The result showed that combination of extracts *Curcuma xanthorrhiza*, *Vitex trifolia*, *Zingiber officinale*, *Citrus sinensis* and *Echinacea purpurea* rhizome had analgesic potential on male mice with writhing test which were represented through % analgesic inhibition of dosage I, dosage II and dosage III : 34,97%, 62,88% and 69,63%

KEYWORDS : analgetic, combination herbs extracts, writhing test