

INTISARI

Telah dilakukan penelitian tentang daya anti-inflamasi kombinasi jus wortel (*Daucus carota*, L) dan tomat (*Lycopersicon lycopersicum*, L) pada mencit jantan. Tujuan dilakukannya penelitian ini adalah untuk membuktikan kebenaran daya anti-inflamasi dan mengetahui besarnya potensi daya anti-inflamasi kombinasi jus wortel dan tomat dalam menghambat terjadinya edema.

Penelitian ini merupakan penelitian eksperimental murni dengan rancangan acak lengkap pola searah menggunakan metode induksi edema pada kaki hewan uji dengan karagenin 1% sub plantar. Hewan uji yang digunakan 48 ekor mencit jantan, galur *Swiss*, umur 2-3 bulan, berat badan 20-30 gram, dibagi menjadi 8 kelompok. Kelompok I diberi injeksi karagenin 1% sub plantar, kelompok II diberi injeksi karagenin 1% sub plantar dan aquadest secara per oral, kelompok III diberi injeksi karagenin 1% dan natrium diklofenak dengan dosis 4,48 mg/kgBB, kelompok IV, V, VI, VII, VIII diberi injeksi karagenin 1% sub plantar dan kombinasi jus wortel dan tomat dengan perbandingan 1 : ¼, 1 : ½, 1 : 1, 1 : 2, 1 : 4. Data yang diperoleh berupa data bobot edema kaki mencit yang selanjutnya digunakan untuk mencari persentase daya anti-inflamasi menurut metode Langford. Data persentase daya anti-inflamasi kemudian dianalisis secara statistik dengan metode analisis varian satu arah dengan taraf kepercayaan 95 % yang dilanjutkan dengan uji Scheffe.

Hasil penelitian menunjukkan bahwa kombinasi jus wortel dan tomat memiliki daya anti-inflamasi dan persentase daya anti-inflamasi pada perbandingan 1 : ¼, 1 : ½, dan 1 : 1 masing-masing sebesar 51,75 %; 62,35 %; dan 73,69 %. Potensi daya anti-inflamasinya berturut-turut adalah 85,88 %; 103,50 %; dan 122,24 %.

Kata kunci : anti-inflamasi, kombinasi jus wortel dan tomat

ABSTRACT

The research about anti-inflammatory effect of the combination of carrot (*Daucus carota*, L) and tomato (*Lycopersicon lycopersicum*, L) juice on male mice had been done. The goal of this research is prove of anti-inflammatory effect and to know the amount of potency of anti-inflammatory effect of combination of carrot and tomato juice in preventing oedema.

The experimental study was conducted in accordance with one way statistic of complete randomized design. Test of anti-inflammatory effect was performed by inducing oedema on test animals paw with sub plantar injection of 1 % carragenin. Forty eight male mice of Swiss strain (with) age 2-3 months and weighting 20-30 g were used at test animals, they were divided into eights groups. Group I was treated with sub plantar injection of 1 % carragenin, group II was treated with sub plantar injection 1 % carragenin and given aquadest orally, group III was treated with sub plantar injection of 1 % carragenin and given sodium diclofenak 4,48 mg/kgBW, group IV, V, VI, VII, and VIII were treated with sub plantar injection of carragenin 1% and combination of carrot and tomato juice with comparison 1 : ¼, 1 : ½, 1 : 1, 1 : 2, 1 : 4. Data obtained were data of weight of mice paw used to calculate the percentage of anti-inflammatory effect according to Langford's method. The data were analized statistically using one way anava with 95 % confidential interval and continued with Scheffe test.

The research result shows that combination of carrot and tomato juice has anti-inflammatory effect and the percentage of anti-inflammatory effect with comparison 1 : ¼, 1 : ½, and 1 : 1 was successively 51.75 %; 62.37 %; and 73, 69 %. Potency of anti-inflammatory effect is successively 85.88 %; 103.50 %; and 122,24 %.

Key words : anti-inflammatory, the combination of carrot and tomato juice