ABSTRAK

Inflamasi merupakan mekanisme respon untuk melindungi tubuh dari agen berbahaya. Senyawa herbal dalam tumbuhan digunakan sebagai alternatif karena kandungan senyawa metabolit yang mampu menghambat sintesis jalur inflamasi. Wadung (*Garcinia tetranda Pierre)* merupakan tanaman yang termasuk dalam keluarga manggis dimana mendapatkan julukan *Queen of Tropical Fruit* karena hampir seluruh bagian buah tersebut dapat dimanfaatkan. Penghambatan hemolisis induksi panas mencampurkan ekstrak dengan suspensi sel darah merah 10% dengan perbandingan sama dipanaskan 56^{o}C dan disentrifuse 2000 rpm 5 menit diukur menggunakan spektrofotometer 560 nm. Adanya penurunan absorbansi dari hemoglobin yang dideteksi dimana semakin kecil absorbansi yang terdeteksi pada ekstrak uji dapat diartikan bahwa membran sel eritrosit semakin stabil. Skrining fitokimia positif pada uji alkaloid, flavonoid, tanin, saponin, dengan nilai TPC (*Total Phenolic Content)* sebesar 12.456 mg GAE/g dan nilai TFC (*Total Flavonoid Contenti)* sebesar 154.380 mg QE/g. Persentase penghambatan pada konsentrasi 100 µg/ml sebesar 98,7% konsentrasi 200 µg/ml sebesar 98,8% konsentrasi 300 µg/ml sebesar 98,9% konsentrasi 400 µg/ml sebesar 99,1% konsentrasi 500 µg/ml sebesar 99,2% dengan nilai IC_{50} sebesar 3,560 µg/ml atau sangat aktif. Ekstrak etil asetat kulit buah wadung (*Garcinia tetranda Pierre)* sangat efektif jika digunakan sebagai agen antiinflamasi karena mampu melindungi membran sel darah merah. Ketika dilihat secara statistik dihasilkan $p<0.05$ yang artinya adanya efek signifikan dari penambahan ekstrak kulit buah wadung (*Garcinia tetranda* Pierre) terhadap persen penghambatan hemolisis yang diinduksi panas.

Kata kunci : Inflamasi, Wadung, Penghambatan hemolisis induksi panas

ABSTRACT

Inflammation is a response mechanism to protect the body from harmful agents. Herbal compounds in plants are used as an alternative because they contaon metabolite compounds that can inhibit the synthesis of inflammatory pathways. Wadung (Garcinia tetranda Pierre) is a plant belonging to the mangosteen family and has earned the nickname Queen of Trpical Fruit because almost all parts of the fruit can be used. Inhibition of heat-induces hemolysis by mixing the extract with a 10% red blood cel suspension in the same ratio, heated to 56^{o}C and centrifuged at 2000 rpm for 5 minutes, was measured using a 560 nm spectrophotometer, where the smaller the absorbance detected in test extract means that the erythrocyte cell membrane is more stable. The phytochemical screening was positive in the alkaloid, flavonoid, tannin, and saponin tests, with a TPC (Total Phenolic Content) value of 12.456 mg GAE/g and a TFC (Total Flavonoid Contenti) value of 154.380 mg QE/g. The percentage of inhibition at a concentration of 100 µg/ml was 98,7% the concentration of 200 µg/ml was 98,8% the concentration of 300 µg/ml was 98,9% the concentration of 400 µg/ml was 99,1% the concentration of 500 µg/ml was 99,2% with an IC_{50} value of 3,560 µg/ml or very active. Ethyl acetate extract of wadung fruit peel (Garcinia tetranda Pierre) is very effective when used as an anti-inflammatory agent because it is able to protect red blood cell membranes. When viewed statistically, it produces $p<0.05$ which means there is a significant effect of the addition of wadung fruit peel extract extract (Garcinia tetranda Pierre) on the percent inhiibition of heat-induced hemolysis.

***Keyword** : Inflammation, Wadung, Inhibition of heat-induced hemolysis*