ABSTRAK

Buah Wadung merupakan salah satu buah dari genus garcinia yang memiliki banyak senyawa metabolit sekunder diantaranya adalah *santon, flavonoid, biflavonoid,* dan depsidon.Inflamasi merupakan reaksi kekebalan alami yang dimiliki tubuh untuk melawan berbagai serangan penyakit atau mikroorganisme jahat. Inflamasi pada tubuh bisa terjadi akibat berbagai hal. Hubungan antara inflamasi dan antiproteinase adalah inflamasi dapat mempengaruhi ekspresi atau aktivitas proteinase dalam tubuh. Selama inflamasi, ada peningkatan pelepasan proteinase oleh sel-sel inflamasi, seperti neutrofil, makrofag, dan sel epitel. Aktivitas proteinase yang berlebihan dapat merusak jaringan dan organ, menyebabkan kerusakan yang lebih lanjut. Untuk melawan efek negatif proteinase, tubuh juga merespon dengan meningkatkan produksi antiproteinase.Uji antiproteinase dapat dilakukan dengan berbagai metode, termasuk pengukuran aktivitas enzimatik proteinase inhibitor atau konsentrasi proteinase inhibitor dalam sampel biologis. Dengan membandingkan hasil uji antiproteinase dengan nilai referensi normal, dapat dievaluasi apakah terdapat peningkatan atau penurunan antiproteinase yang terkait dengan kejadian inflamasi.pada sampel ekstrak kulit buah wadung didapatkan hasil positif dengan beberapa uji yaitu uji tanin, saponin, flavonoid dan alkaloid, sedangkan untuk uji terpenoid didapatkan hasil negatif. Nilai IC_{50} pada ekstrak kulit buah wadung yaitu 3,466 µg/ml sedangkan nilai IC_{50} pada Na-diklofenak sebesar 3,333 µg/ml, dari kedua nilai tersebut dapat diartikan bahwa ekstrak kulit buah wadung memiliki kemampuan antiinflamasi yang baik karena memiliki nilai IC_{50} yang hampir sama dengan nilai IC_{50} Na-diklofenak.ekstrak kulit buah wadung memiliki kemampuan antiinflamasi yang baik karena memiliki nilai IC_{50} yang hampir sama dengan nilai IC_{50} Na-diklofenak.

Kata Kunci: Buah Wadung, inflamasi, antiproteinase

ABSTRACT

Wadung fruit is a fruit from the genus Garcinia which has many secondary metabolite compounds including xanthones, flavonoids, biflavonoids, and depsidone. Inflammation is a natural immune reaction that the body has to fight various disease attacks or evil microorganisms. Inflammation in the body can occur due to various things. The relationship between inflammation and antiproteinases is that inflammation can affect the expression or activity of proteinases in the body. During inflammation, there is increased release of proteinases by inflammatory cells, such as neutrophils, macrophages, and epithelial cells. Excessive proteinase activity can damage tissues and organs, causing further damage. To counter the negative effects of proteinase, the body also responds by increasing the production of antiproteinase. Antiproteinase testing can be carried out by various methods, including measuring the enzymatic activity of proteinase inhibitors or the concentration of proteinase inhibitors in biological samples. By comparing the results of the antiproteinase test with normal reference values, it can be evaluated whether there is an increase or decrease in antiproteinase which is associated with inflammatory events. In samples of wadung fruit peel extract, positive results were obtained with several tests, namely tannin, saponin, flavonoid and alkaloid tests, while for the terpenoid test negative results were obtained. The IC_{50} value for Wadung fruit peel extract is 3.466 µg/ml, while the IC_{50} value for Na-diclofenac is 3.333 µg/ml. From these two values, it can be interpreted that Wadung fruit peel extract has good anti-inflammatory abilities because it has an IC_{50} value that is almost the same as the IC_{50} value of Na-diclofenac extract. Wadung fruit peel has good anti-inflammatory abilities because it has an IC_{50} value that is almost the same as the IC_{50} value of Na-diclofenac.

Keywords: *Wadung, inflammation, antiproteinase*