ABSTRAK

Aktivitas Ekstrak Daun Dadap Serep *(Erythrina subumbrans)* Terhadap Kadar Adiponektin dan *Malondialdehid* (MDA) Pada Obesitas

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Obesitas disebabkan karena jumlah lemak berlebih di dalam tubuh, yang dapat mengakibatkan inflamasi tingkat rendah pada jaringan adiposa, Jaringan lemak menghasilkan adiponektin yang merupakan protein menyerupai kolagen yang berfungsi dalam meningkatkan antiinflamasi. Stres oksidatif dapat diakibatkan sintesis sitokin pro-inflamasi pada jaringan adiposa yang mendorong respon inflamasi dengan menciptakan reaktif oksigen spesies (ROS) dan produk MDA (malondialdehid). Daun dadap serep (*Erythrina subumbrans)* secara empiris berkhasiat sebagai obat demam dan anti-inflamasi. Tujuan penelitian untuk mengetahui Aktivitas Ekstrak Daun Dadap Serep Terhadap Kadar Adiponektin Dan Malondialdehid (MDA) serta dosis efektifnya. Penelitian ini dilakukan secara preventif menggunakan model hewan yang di induksi makanan tinggi lemak. Hewan uji yang digunakan tikus jantan galur *Swiss Webster* yang dibagi lima kelompok yaitu, kontrol negatif, kontrol positif, kontrol pembanding orlistat 2,16 mg/kg BB, ekstrak daun dadap serep 100 mg/kgBB, 200 mg/kgBB, Pengujian dilakukan selama 36 hari. Kemudian dilakukan pengukuran kadar MDA menggunkan Spektrofotometer UV-Vis dan adiponektin menggunakan Elisa reader. Hasil dari penelitian menunjukan penurunan kadar MDA pada dosis 200 mg/kg BB dan pada kadar adiponektin megalami kenaikan dengan rata-rata 40,6 ng/mL. Ekstrak Etanol Daun dadap serep (*Erythrina subumbrans)* dapat menurunkan kadar malondialdehid dengan dosis efektif 200 mg/kg BB dan meningkatkan kadar adiponektin dengan dosis efektinya 200 mg/kg BB.

Kata Kunci : adiponektin, *Erythrina subumbrans*, Malondialdehid,

ABSTRACT

Activity of Dadap Serep (*Erythrina subumbrans*) Leaf Extract Against Adiponectin and Malondialdehyde (MDA) Levels in Obesity

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Obesity is caused by the amount of excess fat in the body, which can lead to low-level inflammation in adipose tissue. Fat tissue produces adiponectin which is a collagen-like protein that functions in increasing anti-inflammatory. Oxidative stress can be caused by the synthesis of pro-inflammatory cytokines in adipose tissue that promote the inflammatory response by creating reactive oxygen species (ROS) and MDA products (malondialdehyde). Dadap serep (Erythrina subumbrans) leaves are empirically efficacious as a fever medicine and anti-inflammatory. The purpose of this study was to determine the activity of Dadap Serep Leaf Extract on Adiponectin and Malondialdehyde (MDA) levels and their effective dose. This research was conducted in a preventive manner using animal models induced by high-fat diet. The test animals used were male rats of the Swiss Webster strain which were divided into five groups, namely, negative control, positive control, comparative control orlistat 2.16 mg/kg body weight, dadap serep leaf extract 100 mg/kg body weight, 200 mg/kg body weight, the test was carried out for 36 day. Then measured levels of MDA using a UV-Vis spectrophotometer and adiponectin using an Elisa reader. The results of the study showed a decrease in MDA levels at a dose of 200 mg/kg BW and adiponectin levels increased by an average of 40.6 ng/mL. Ethanol extract of Dadap serep leaf (Erythrina subumbrans) can reduce malondialdehyde levels with an effective dose of 200 mg/kg BW and increase adiponectin levels with an effective dose of 200 mg/kg BW.

***Keywords**: adiponectin, Erythrina subumbrans, Malondialdehyde,*