

ABSTRAK

Diabetes Mellitus (DM) adalah gangguan metabolic yang ditandai dengan peningkatan kadar glukosa darah (hiperglikemia). Pengobatan herbal sering digunakan sebagai pilihan, dan kulit buah jeruk bali (*Citrus maxima merr*) diyakini berpotensi sebagai antihiperglikemia karena kandungan senyawa bioaktifnya seperti flavonoid dan vitamin C. Penelitian ini bertujuan menguji efek antihiperglikemia dari fraksi etil asetat ekstrak etanol kulit buah jeruk bali (*Citrus maxima Merr*) pada tikus Wistar yang diinduksi aloksan. Tikus hiperglikemia dibagi menjadi 6 kelompok (Kontrol Normal, Negatif, Positif/Metformin, dan Dosis Fraksi 125, 250, 500 mg/kgBB). Perlakuan diberikan selama 14 hari. Hasil penelitian menunjukkan bahwa fraksi etil asetat kulit jeruk bali secara signifikan menurunkan kadar glukosa darah tikus hiperglikemia, dengan efek mulai terlihat jelas pada Hari ke-9. Efek penurunan ini bersifat dosis-dependen, di mana dosis 500 mg/kgBB memberikan efek antihiperglikemia paling optimal, mendekati efek Metformin dan kelompok normal. Fraksi etil asetat kulit jeruk bali efektif menurunkan kadar glukosa darah tikus hiperglikemia. Aktivitas ini diduga kuat berasal dari kandungan senyawa aktif seperti flavonoid, saponin, dan alkaloid.

Kata Kunci: *Citrus maxima merr*, Fraksi Etil Asetat, Antihiperglikemia, Glukosa Darah.

ABSTRACT

Diabetes Mellitus (DM) is a metabolic disorder characterized by elevated blood glucose levels (hyperglycemia). Herbal medicine is often used as an alternative treatment, and pomelo peel (*Citrus maxima* Merr) is believed to have potential as an antihyperglycemic agent due to its content of bioactive compounds such as flavonoids and vitamin C. This study aimed to examine the antihyperglycemic effect of the ethyl acetate fraction of the ethanol extract of pomelo peel (*Citrus maxima* Merr) in alloxan-induced Wistar rats. Hyperglycemic rats were divided into 6 groups (Normal Control, Negative Control, Positive Control/Metformin, and Fraction Doses of 125, 250, 500 mg/kgBW). The treatment was administered for 14 days. The results showed that the pomelo peel ethyl acetate fraction significantly reduced the blood glucose levels of the hyperglycemic rats, with the effect becoming clearly visible by Day 9. This reduction effect was dose-dependent, where the 500 mg/kgBW dose provided the most optimal antihyperglycemic effect, closely approaching the effect of Metformin and the normal group. The ethyl acetate fraction of pomelo peel is effective in lowering the blood glucose levels of hyperglycemic rats. This activity is strongly suspected to originate from the content of active compounds such as flavonoids, saponins, and alkaloids.

Keywords: *Citrus maxima* Merr, Ethyl Acetate Fraction, Antihyperglycemic, Blood Glucosa