ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian kombinasi infusa kulit batang faloak (IKBF) dengan akarbosa terhadap efek antihiperglikemik pada mencit yang terinduksi glukosa. Jenis penelitian yang digunakan yaitu eksperimental murni rancangan acak lengkap pola searah. Metode yang digunakan yaitu UTGO. Sebanyak 30 ekor mencit dibagi ke dalam 6 kelompok secara acak. Kelompok I (kontrol normal) diberikan akuades 25 g/kgBB, kelompok II (kontrol glukosa) diberikan glukosa 2 g/kgBB, kelompok III (kontrol akarbosa) diberikan akarbosa 40 mg/kgBB dan glukosa 2 g/kgBB, kelompok IV (kontrol IKBF dosis 3,33 g/kgBB) diberikan glukosa 2 g/kgBB dengan IKBF 3,33 g/kgBB, kelompok V-VI diberikan glukosa 2 g/kgBB dengan dosis kombinasi IKBF 3,33 g/kgBB-akarbosa 40 mg/kgBB; IKBF 1,67 g/kgBB-akarbosa 40 mg/kgBB. Induksi glukosa per oral dilakukan 30 menit setelah perlakuan pada kelompok III-VI. Kadar gula darah diukur pada menit ke 0 sebelum perlakuan dan menit ke-15, 30, 60, dan 120 setelah induksi glukosa menggunakan glukometer. Dihitung AUC kadar gula darah menit ke-0 sampai 120 dan dianalisis secara statistik. Hasil uji fitokimia menunjukkan IKBF mengandung flavonoid, tanin, dan saponin. Hasil penelitian menunjukkan bahwa kombinasi IKBF-akarbosa tidak memiliki efek antihiperglikemik.

Kata kunci: antihiperglikemik, kombinasi, infusa, faloak, akarbosa

ABSTRACT

The aim of this research is to determine the effect of faloak bark infusion (IKBF) towards antihyperglycemic effect in glucose-induced *DDY* male mice. This study was a pure experimental research with one-way-complete random design. The method used in this study is TTGO. A total of 30 mice were randomly divided into 6 groups. Group I (normal control) was given 25 g/kgBW aquadest, group II (glucose control) was given 2 g/kgBW glucose, group III (positive control) was given 40 mg/kgBW acarbose and 2 g/kgBW glucose. Group IV (IKBF control 3.33 g/kgBW) was given glucose 2 g/kgBW with IKBF 3.33 g/kgBW. Group V-VI were given glucose 2 g/kgBW with combined dose of IKBF 3.33 g/kgBW-acarbose 40 mg/kgBW; IKBF 1.67 g/kgBW-acarbose 40 mg/kgBW. Oral glucose induction was done 30 minutes after the treatment in groups III-V. The blood glucose levels were measured at 0 minutes before treatment and 15, 30, 60, and 120 minutes after glucose induction used glucometer. AUC blood glucose levels were calculated from 0 to 120 minutes and analyzed statistically. Phytochemical test results showed IKBF contains flavonoids, tannins, and saponins. The results showed that the combination of IKBF-acarbose had no antihyperglycemic effect.

Keywords: antihyperglicemic, combination, infusion, faloak, acarbose