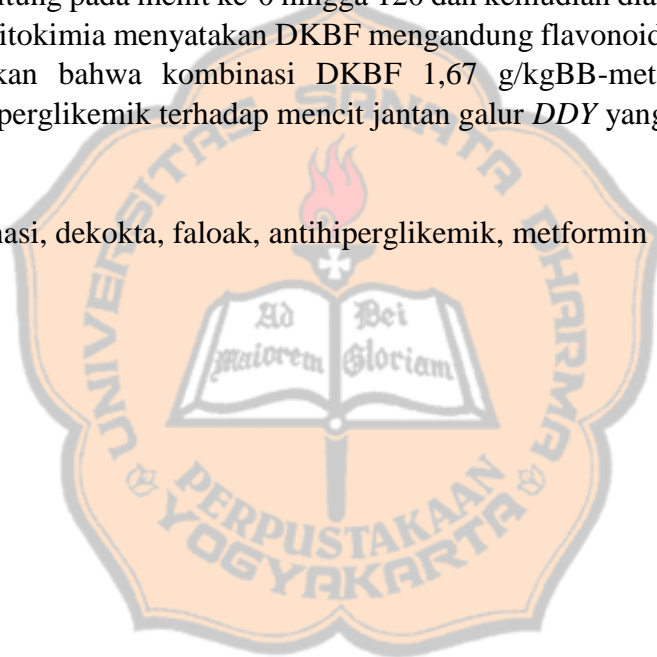


## ABSTRAK

Penelitian ini bertujuan untuk menguji efek antihiperglikemik kombinasi dekokta kulit batang faloak (DKBF) berturutan dengan metformin pada mencit terinduksi glukosa. Penelitian ini bersifat eksperimental murni dengan rancangan acak lengkap searah. Metode yang digunakan yaitu Uji Toleransi Glukosa Oral. Uji fitokimia secara kualitatif dilakukan untuk mengidentifikasi kandungan flavonoid, alkaloid, tanin dan saponin. Pengujian dilakukan pada 30 ekor mencit terbagi secara acak menjadi 6 kelompok. Kelompok I (kontrol normal) diberikan aquadest 25 g/kgBB, kelompok II (kontrol gula) diberikan glukosa 2 g/kgBB, kelompok III (kontrol metformin) diberikan metformin 65 mg/kgBB, kelompok IV (kontrol DKBF) diberikan DKBF 3,33 g/kgBB, kelompok V diberikan kombinasi DKBF 3,33 g/kgBB-metformin 65 mg/kgBB, kelompok VI diberikan kombinasi DKBF 1,67 g/kgBB-metformin 65 mg/kgBB. Induksi glukosa diberikan kelompok III-VI secara peroral 30 menit setelah mencit diberi perlakuan. Kadar gula darah diukur menit ke-0 sebelum perlakuan dan menit ke-15, 30, 60, 90 dan 120 setelah induksi glukosa menggunakan glukometer. *Area Under Curve (AUC)* kadar gula darah dihitung pada menit ke-0 hingga 120 dan kemudian dianalisis secara statistik. Hasil uji penapisan fitokimia menyatakan DKBF mengandung flavonoid, tanin, saponin. Hasil penelitian menyatakan bahwa kombinasi DKBF 1,67 g/kgBB-metformin 65 mg/kgBB memiliki efek antihiperglikemik terhadap mencit jantan galur *DDY* yang terinduksi glukosa.

**Kata kunci:** kombinasi, dekokta, faloak, antihiperglikemik, metformin



## ABSTRACT

The aim of this study was to examine the antihyperglycemic effect of the combination of faloak bark decoction (DKBF) successively with metformin on glucose-induced mice. This research is purely experimental with a unidirectional completely randomized design. The method used is the Oral Glucose Tolerance Test. Qualitative phytochemical tests were carried out to identify the content of flavonoids, alkaloids, tannins and saponins. The test was carried out on 30 mice divided randomly into 6 groups. Group I (normal control) was given 25 g/kgBW aquadest, group II (sugar control) was given glucose 2 g/kgBW, group III (metformin control) was given metformin 65 mg/kgBW, group IV (DKBF control) was given DKBF 3, 33 g/kgBW, group V was given a combination of DKBF 3.33 g/kgBW-metformin 65 mg/kgBW, group VI was given a combination DKBF 1.67 g/kgBW-metformin 65 mg/kgBW. Glucose induction was given to groups III-VI orally 30 minutes after the mice were given treatment. Blood sugar levels were measured 0 minutes before treatment and 15, 30, 60, 90 and 120 minutes after glucose induction using a glucometer. Area Under Curve (AUC) blood sugar levels were calculated at 0 to 120 minutes and then statistically analyzed. Phytochemical test results stated that DKBF contains flavonoids, tannins, and saponins. The results showed that the combination of DKBF 1.67 g/kgBW-metformin 65 mg/kgBW had an antihyperglycemic effect against glucose-induced *DDY* male mice.

Keywords: combination, dekokta, faloak, antihyperglycemic, metformin

