

ABSTRAK

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Program Studi : Kedokteran Umum
Judul Skripsi : Evaluasi Aktivitas Diuretik Ekstrak Etanol Biji Kebiul (*Caesalpinia bonducella* L) terhadap Kadar Proteinuria pada Tikus Putih Jantan Galur *Sprague dawley* setelah Dilakukan Nefrektomi Subtotal 5/6 dan Tinjauannya Menurut Pandangan Islam

Latar Belakang: *Caesalpinia bonducella* merupakan tanaman berasal dari India. Ekstrak biji tanaman kebiul (*Caesalpinia bonducella*) mengandung senyawa alkaloid, bonducin, saponin dan terpenoid. Beberapa penelitian yang sudah dilakukan membuktikan bahwa ekstrak biji kebiul sangat bermanfaat dalam bidang kesehatan sebagai obat komplementer.

Tujuan: Untuk mengetahui pengaruh ekstrak etanol biji kebiul terhadap kadar proteinuria dan gambaran histopatologi ginjal pada tikus yang diinduksi nefrektomi subtotal 5/6 dari sisi kedokteran dan Islam.

Metode: Penelitian eksperimental menggunakan metode in vivo dengan subjek penelitian tikus putih jantan galur *Sprague dawley* dengan berat badan antara 250-300 gram. Tikus dilakukan nefrektomi subtotal 5/6 dengan tujuan mengganggu fungsi kerja ginjal dan diberikan dosis ekstrak etanol biji kebiul selama 14 hari berturut-turut 150 mg/kgBB, 300 mg/kgBB dan 500 mg/kgBB. Dilakukan strip test urin

Hasil: Pada gambaran grafik pemberian ekstrak mengalami perubahan yang terlihat secara grafik yaitu nilai rerata kadar protein urin pada K.1.0 (200) sebagai kontrol negatif, K.2.0 (161,25) pengobatan dengan furosemid, K.3.0 (21,66) ekstrak biji kebiul dosis I, K.4.0 (26,25) ekstrak biji kebiul dosis II, K.5.0 (22,5) ekstrak biji kebiul dosis I.

Kesimpulan: Pemberian ekstrak etanol biji *Caesalpinia bonducella* L berperan pada penurunan protein urin pada model hewan coba tikus jantan galur *Sprague dawley* nefrektomi subtotal 5/6

Kata kunci: Penyakit Ginjal, Kadar Proteinuria, Nefrektomi Subtotal 5/6, *Caesalpinia bonducella*

ABSTRACT

Name : Afifah Humairah Putri Hasya
Study Program : Medicine
Title : Reduction of Proteinuria Levels of Sprague Dawley Rats
With Kebiul (*Caesalpinia Bonducella* L) Seed Extract
According To The Islamic View

Background: *Caesalpinia bonducella* is a plant originating from India. Seed extract of the kebiul plant (*Caesalpinia bonducella*) contains compounds of alkaloids, bonducin, saponins and terpenoids. Several studies have been conducted to prove that kebiul seed extract is very useful as a complementary medicine. To determine the effect of kebiul seed ethanol extract on proteinuria levels and kidney histopathological features in male white rats induced by 5/6 subtotal nephrectomy from the medical and Islamic perspective.

Methods: Experimental research using the *in vivo* method with male white rats of the Sprague Dawley strain, with body weight between 250-300grams. Rats were subjected to 5/6 subtotal nephrectomy to interfering the kidney function and given doses of ethanol extract of kebiul seeds for 14 days, 150 mg/kgBW, 300 mg/kgBW, and 500 mg/kgBW, respectively. Urine test strips were performed and the kidneys were taken for staining on HE histology slides.

Results: In the graphic illustration, the administration of the extract experienced graphically visible changes, namely the mean value of urine protein content at K.1.0 (200) as a negative control, K.2.0 (161.25) for treatment with furosemide, K.3.0 (21.66) for seed extract kebiul dose I, K.4.0 (26.25) kebiul seed extract dose II, K.5.0 (22.5) kebiul seed extract dose I. The lowest reduction in protein levels was found in the group given kebiul ethanol extract dose 150 mg /kgBB with an average of 21.66.

Conclusion: Administration of *Caesalpinia bonducella* L seed ethanol extract played a role in reducing urine protein in the experimental animal model of male Sprague Dawley nephrectomy 5/6 strain.

Keywords: *Caesalpinia bonducella*, Proteinuria Levels, Kidney Disease, 5/6 Subtotal Nephrectomy