

**PENGARUH PRAPERLAKUAN INFUSA BUAH MAHKOTA DEWA
(*Phaleria macrocarpa* (Scheff.) Boerl.) TERHADAP KETOKSIKAN
AKUT TEOFILIN PADA TIKUS JANTAN**

INTISARI

Telah dilakukan penelitian untuk mempelajari pengaruh praperlakuan infusa buah Mahkota dewa (*Phaleria macrocarpa* (Scheff.) Boerl.) terhadap ketoksikan akut teofilin pada tikus jantan. Penelitian ini menggunakan rancangan acak lengkap pola searah. Sebanyak 90 ekor tikus jantan galur wistar dengan berat 200-300 gram dibagi menjadi 9 kelompok. Kelompok I (kontrol Mahkota dewa) diberi infusa Mahkota dewa dosis 1600 mg/Kg BB secara oral, kelompok II (kontrol teofilin) diberi suspensi teofilin dosis subtoksik yaitu dosis yang menunjukkan gejala toksik, tetapi hanya menimbulkan kematian seminimal mungkin (190 mg/Kg BB), kelompok III (kontrol teofilin) diberi suspensi teofilin dosis toksik (250 mg/Kg BB). Enam kelompok lain diberi perlakuan seperti kelompok II dan III yang enam hari sebelumnya diberi infusa buah Mahkota dewa dengan dosis berturut-turut 400, 800, dan 1600 mg/Kg BB. Angka kematian tikus diamati selama 24 jam setelah pemberian teofilin. Hasil penelitian menunjukkan bahwa infusa buah Mahkota dewa secara nyata mampu menurunkan angka kematian tikus-terangsang teofilin. Kesimpulannya antaraksi toksikologi antara infusa buah Mahkota dewa dan teofilin menyebabkan penurunan ketoksikan akut teofilin yang mekanismenya kemungkinan melalui perlambatan eliminasi senyawa antiasma tersebut

kata kunci : ketoksikan akut, teofilin, Mahkota dewa

**PRETREATMENT EFFECT OF MAHKOTA DEWA INFUS
(*Phaleria macrocarpa* (Scheff.) Boerl.) ON THEOPHYLLIN ACUTE
TOXICITY IN MALE RATS**

ABSTRACT

A research about the acute toxicity effect of Mahkota dewa infus as pretreatment on male rats induced theophyllin had been conducted. This research used one way completely randomized experimental design. Ninety male rats were divided randomly into nine groups. The first group (as Mahkota dewa control) was given the Mahkota dewa infus in dose of 1600 mg/Kg BW for six days. The second group (as theophyllin control) was given the theophyllin suspension in dose of 190 mg/Kg BW (subtoxic dose). The third group (as theophyllin control) was given the theophyllin suspension in dose of 250 mg/Kg BW. The fourth until the sixth group were given the Mahkota dewa infus pretreatment in dose 400, 800, and 1200 mg/Kg BW respectively for six days. The seventh until ninth group were given the Mahkota dewa infus pretreatment in dose 400, 800, and 1200 mg/Kg BW respectively for six days. Then on the seventh day they were given theophyllin with the dose of 190 and 250 mg/Kg BW. Mortality rate of rats were examined for 24 hours following theophyllin administration. The result of study showed that the Mahkota dewa infus with the doses 400, 800, and 1200 mg/Kg BW given orally could decrease the mortality rate of theophyllin acute toxicity in the percentage of 0%; 20%; and 30% (for subtoxic dose) and 30%; 30% and 50% (for toxic dose) respectively with comparing the control group. In conclusion, toxicological interaction between Mahkota dewa infus and theophyllin have resulted in decreased acute toxicity of theophyllin, whose mechanism was thought via the increasing of its elimination.

Key word ; acute toxicity, theophyllin, *Phaleria macrocarpa* (Scheff) Boerl.