

ABSTRAK

Nama : Siti Faridah Farhah
Program Studi : Sarjana Farmasi
Judul : Aktivitas Antibakteri Ekstrak Etanol Buah dan Daun
Berenuk (*Crescentia cujete* L.) terhadap Bakteri *Klebsiella pneumoniae* ATCC 27736.

Berenuk (*Crescentia cujete* L.) merupakan tanaman dari famili *Bignoniaceae* yang memiliki beberapa bioaktivitas diantaranya dapat mengobati penyakit diare dan jerawat. Penelitian ini bertujuan untuk menganalisa aktivitas antibakteri ekstrak etanol buah dan daun berenuk terhadap *Klebsiella pneumoniae* ATCC 27736. Ekstrak buah dan daun berenuk dibuat dengan cara maserasi menggunakan pelarut etanol 70%. Penapisan fitokimia yang dilakukan pada ekstrak meliputi flavonoid, saponin, alkaloid, tanin, terpenoid dan glikosida jantung. Uji aktivitas antibakteri dilakukan dengan cara difusi sumur pada media *Mueller Hinton Agar* (MHA) dengan konsentrasi ekstrak 20%, 40%, 60%, 80%, dan 100% dalam DMSO 10%.. Uji aktivitas antibakteri dilanjutkan dengan penentuan konsentrasi hambat minimum metode dilusi padat. Penapisan fitokimia menunjukkan bahwa ekstrak buah berenuk mengandung senyawa flavonoid, saponin, alkaloid, tanin, terpenoid dan glikosida jantung sedangkan ekstrak daun berenuk hanya mengandung senyawa flavonoid, saponin dan alkaloid. Berdasarkan uji aktivitas antibakteri, diperoleh bahwa ekstrak buah berenuk memiliki aktivitas antibakteri terhadap *Klebsiella pneumoniae* ATCC 27736 pada konsentrasi ekstrak 40%, 60%, 80% dan 100% sedangkan ekstrak daun berenuk tidak memiliki aktivitas antibakteri terhadap *Klebsiella pneumoniae* ATCC 27736. Konsentrasi hambat minimum (KHM) pada ekstrak buah berenuk ada pada konsentrasi 40% terhadap bakteri *Klebsiella pneumoniae* ATCC 27736.

Kata kunci : Antibakteri, Berenuk, Ekstrak, *Klebsiella pneumoniae*

ABSTRACT

Name : Siti Faridah Farhah
Study Program : Bachelor Pharmacy
Title : Antibacterial Activity of Ethanol Ekstract of Calabash
Fruit and Leaves (*Crescentia cujete* L.) against *Klebsiella pneumoniae* ATCC 27736.

Calabash fruit (Crescentia cujete L.) is a plant from the Bignoniaceae family which has several bioactivities including treating diarrhea and acne. This research was aimed to determine the presence of antibacterial activity of ethanolic extracts from flesh of fruit and leaves of calabash against Klebsiella pneumoniae ATCC 27736. Calabash fruit and leaves of calabash extracts was made by macerating using 70% ethanol solvent. Phytochemical screening carried out on the extracts was flavonoids, saponins, alkaloids, tannins, terpenoids and cardiac glycosides. Antibacterial activity test was carried out by diffusing holes on Mueller Hinton Agar (MHA) media with extract concentrations of 20%, 40%, 60%, 80%, and 100% in 10% DMSO. The antibacterial activity test was continued with the determination of MIC test by solid dilution. Phytochemical screening showed the presence of flesh of fruit extracts are flavonoids, saponins, alkaloids, tannins, terpenoids and cardiac glycosides while the leaves extract only contains flavonoids, saponins and alkaloids. Based on the results of the antibacterial activity test, it was found that the calabash flesh of fruit extract had antibacterial activity against Klebsiella pneumoniae ATCC 27736 at extract concentrations of 40%, 60%, 80% and 100% while calabash leaf extracts does not have antibacterial activity. The minimum inhibitory concentration (MIC) of calabash fruit extract is at a concentration of 40% against Klebsiella pneumoniae bacteria ATCC 27736.

Key words : Antibacterial, Calabash fruit, Extract, *Klebsiella pneumoniae*