

INTISARI

ARISANDI, L.J., 2016 UJI AKTIVITAS ANTIBAKTERI EKSTRAK ETANOL, FRAKSI *n*-HEKSANA, ETIL ASETAT DAN AIR DARI DAUN TALAS (*Colocasia esculenta* [L.] Schott) TERHADAP *Escherichia coli* ATCC 25922, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Daun talas mengandung 6-C-glikosilflavonoid dan O-glikosilflavonoid, diantaranya schaftoside isoschaftoside, orientin, isovitexin, isoorientin, vitexin, luteolin 7- O –sophoroside, selulosa, dan fenol. Penelitian lain menyebutkan kandungan daun talas diantaranya saponin, terpen, tanin, flavonoid dan alkaloid diduga memiliki aktivitas antibakteri. Tujuan penelitian ini adalah untuk mengetahui aktivitas fraksi *n*-heksan, fraksi etil asetat, fraksi air dan ekstrak etanol daun talas sebagai antibakteri terhadap *Escherichia coli* ATCC 25922.

Serbuk daun talas dimaserasi dengan etanol 96%, kemudian difraksinasi menggunakan pelarut *n*-heksan, etil asetat, dan air. Fraksi *n*-heksan, etil asetat, air dan ekstrak diuji aktivitas antibakteri menggunakan metode dilusi, dengan konsentrasi 40,0%; 20%; 10%; 5%; 2,5%; 1,25%; 0,625%; 0,313%; 0,156%; 0,078% terhadap bakteri *Escherichia coli* ATCC 25922.

Hasil penelitian menunjukkan bahwa fraksi *n*-heksan, etil asetat, air, dan ekstrak daun talas mempunyai aktivitas antibakteri terhadap *Escherichia coli* dengan konsentrasi bunuh minimum berturut – turut 40%; 10%; 20%; dan 20%. Fraksi etil asetat dari daun talas mempunyai aktivitas antibakteri paling efektif dibandingkan fraksi *n*-heksan, air dan ekstrak etanol.

Kata kunci : *Colocasia esculenta* [L.] Schoot, *Escherichia coli* ATCC 25922, antibakteri, fraksi *n*-heksan, fraksi etil asetat, fraksi air.

ABSTRACT

ARISANDI, L.J., 2016, TEST ACTIVITIES ANTIBACTERIALS ETHANOL EXTRACT, FRACTION n-HEXANE, ETHYL ACETATE AND WATER OF (*Colocasia esculenta* [L.] Schott) ON *Escherichia coli* ATCC 25922, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

(*Colocasia esculenta* [L.] Schott) leaves containing 6-C-glikosilflavonoid and O-glikosilflavonoid, including schaftoside isoschaftoside, orientin, isovitexin, isoorientin, vitexin, luteolin 7- O -sophoroside, cellulose, and phenol. Other studies mentioned taro leaf content including saponins, terpenes, tannins, flavonoids and alkaloids is thought to have antibacterial activity. The purpose of this study was to determine the activity of the fraction of n-hexane, ethyl acetate fraction, the fraction of water and ethanol extracts of leaves of taro as an antibacterial against *Escherichia coli* ATCC 25922.

Colocasia esculenta [L] shoot leaf powder was macerad with 96% ethanol. And then fractionated using a solvent n-hexane, ethyl acetate and water. Fraction of n-hexane, ethyl acetate, water and the ethanol extract were tested for antibacterial activity using dilution method, with a concentration of 40%; 20%; 10%; 5%; 2,5%; 1,25%; 0,625%; 0,313%; 0,156%, 0,0078% of the bacteria *Escherichia coli* ATCC 25922.

The results showed that the fraction of n-hexane, ethyl acetate, water, and a *Colocasia esculenta* [L] schott leaf extract has antibacterial activity against *Escherichia coli* with a minimum kill concentration respectively - contributed 40%; 10%; 20%; and 20%. Ethyl acetate fraction of taro leaf has the most effective antibacterial activity than the fraction of n-hexane, water and ethanol extract.

Keywords :. *Colocasia esculenta* [L.] Schoot, *Escherichia coli* ATCC 25922, antibacterial, fraction of n-hexane, ethyl acetate fraction, the fraction of water.