

INTISARI

DAMAYANTI, A.D., 2019, UJI AKTIVITAS ANTIJAMUR EKSTRAK ETANOL, FRAKSI *n*-HEKSANA, ETIL ASETAT, DAN AIR DARI DAUN SENDUDUK BULU (*Clidemia hirta* [L.] D.Don) TERHADAP JAMUR *Candida albicans* ATCC 10231 SKRIPSI, FALKUTAS FARMASI, UNIVERSITAS SETIA BUDI SURAKARTA.

Senduduk bulu (*Clidemia hirta* [L.] D.Don) mengandung senyawa flavonoid, steroid, saponin dan tanin yang mempunyai aktivitas sebagai antijamur. Tujuan penelitian ini untuk mengetahui aktivitas antijamur ekstrak etanol 96%, fraksi *n*-heksan, fraksi etil asetat dan fraksi air dari daun senduduk bulu terhadap jamur *Candida albicans* ATCC 10231.

Daun senduduk bulu diekstraksi dengan metode maserasi menggunakan pelarut etanol 96%, kemudian difraksinasi menggunakan pelarut *n*-heksan, etil asetat dan air. Hasil ekstraksi dan fraksinasi dilakukan uji aktivitas antijamur menggunakan metode difusi dengan konsentrasi 40%, 20%, 10% dan menggunakan metode dilusi dengan konsentrasi 40%, 20%, 10%, 5%, 2,5%, 1,25%, 0,625%, 0,312%, 0,156%, dan 0,078%. Kontrol positif yang digunakan adalah ketokonazole 2% dan kontrol negatif yang digunakan adalah DMSO 5%. Hasil uji aktivitas antijamur dianalisa dengan metode anova two way.

Hasil penelitian menunjukkan semua fraksi dan ekstrak etanol dari daun senduduk bulu memiliki aktivitas antijamur terhadap *Candida albicans* ATCC 10231. Fraksi etil asetat merupakan fraksi yang memiliki aktivitas antijamur yang paling efektif, hasil identifikasi senyawa secara kromatografi lapis tipis menunjukkan fraksi etil asetat mengandung senyawa flavonoid dan tanin. Diameter zona hambat fraksi etil asetat dengan konsentrasi 40%, 20% dan 10% terhadap *Candida albicans* ATCC 10231 berturut-turut adalah 18,12 mm, 16,56 mm dan 14,43 mm. Fraksi etil asetat memiliki nilai Konsentrasi Bunuh Minimum sebesar 1,25%.

Kata kunci : Daun senduduk bulu, *Candida albicans*, antijamur

ABSTRACT

DAMAYANTI, A.D., 2019, ANTIFUNGAL ACTIVITY TEST OF ETHANOL EXTRACT, *n*-HEXANE, ETHYL ACETATE AND WATER FRACTION OF SENDUDUK BULU (*Clidemia hirta* [L.] D.Don) AGAINST *Candida albicans* ATCC 10231 THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Senduduk bulu (*Clidemia hirta* [L.] D.Don) contains flavonoids, steroids, saponins and tannins which have antifungal activity. The purpose of this study was to determine the antifungal activity of 96% ethanol extract, *n*-hexane fraction, ethyl acetate fraction and water fraction from leaves of senduduk bulu against fungi *Candida albicans* ATCC 10231.

The leaves of senduduk bulu were extracted by maceration method using ethanol 96% solvent, then fractionated using *n*-hexane, ethyl acetate and water solvents. The results of extraction and fractionation were carried out by antifungal activity tests using a diffusion method with a concentration of 40%, 20%, 10% and using a dilution method with concentrations of 40%, 20%, 10%, 5%, 2.5%, 1.25%, 0.625 %, 0.312 %, 0.156%, and 0.078%. The positive control used was ketoconazole 2% and the negative control used was DMSO 5%. The results of the antifungal activity test were analyzed by the two way ANOVA method.

The results showed that all fractions and ethanol extracts of leaves of Senduduk Bulu had antifungal activity against *Candida albicans* ATCC 10231. Ethyl acetate fraction was the most effective fraction of antifungal activity, the results of identification of compounds by thin layer chromatography showed ethyl acetate fractions containing flavonoids and tannins . The diameter of the inhibition zone of ethyl acetate fraction with a concentration of 40%, 20%, and 10% against *Candida albicans* ATCC 10231 were 18.12 mm, 16.56 mm and 14.43 mm, respectively. The ethyl acetate fraction has a minimum Kill Concentration value of 1.25%.

Keywords : Senduduk bulu's leaves, *Candida albicans*, antifungal