VARIASI PELARUT KONVENSIONAL DAN *DEEP EUTECTIC SOLVENTS* (DES) UNTUK PROSES EKSTRAKSI DAUN GAGETAN HARIMAU (*PARABOEA LEUSERENSIS*)

ABSTRAK

Daun gagatan harimau (*Paraboea leuserensis*) merupakan tanaman lokal yang berpotensi mengandung senyawa bioaktif. Penelitian ini bertujuan untuk mengetahui karakteristik ekstraksi daun gagatan harimau menggunakan variasi pelarut konvensional dan *Deep Eutectic Solvents* (DES). Pelarut konvensional yang digunakan yaitu etanol, etil asetat, dan n-heksan, sedangkan pelarut DES terdiri dari DES I dan DES II. Penelitian dilakukan secara eksperimental melalui pembuatan simplisia, karakterisasi simplisia, skrining fitokimia, uji viskositas DES, dan analisis FTIR.

Hasil karakterisasi simplisia menunjukkan kadar air 7,99%, kadar sari larut air 21,63%, kadar sari larut etanol 18,03%, kadar abu total 7,71%, dan kadar abu tidak larut asam 2,70%. Skrining fitokimia menunjukkan hasil positif terhadap flavonoid, saponin, tanin, alkaloid, dan steroid. Uji viskositas menunjukkan DES I memiliki viskositas 83,5 mPs dan DES II 19,2 mPs. Hasil FTIR menunjukkan adanya perbedaan gugus fungsi pada tiap ekstrak, sehingga jenis pelarut memengaruhi karakteristik senyawa yang terekstraksi. Etanol cenderung menarik senyawa polar hingga semi-polar, etil asetat menarik senyawa semi-polar, sedangkan n-heksan lebih dominan menarik senyawa nonpolar.

Kata kunci: *Paraboea leuserensis*, gagatan harimau, DES, pelarut konvensional, FTIR

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ABSTRACT

Gagatan harimau leaves (*Paraboea leuserensis*) are local plants that have potential as a source of bioactive compounds. This study aimed to determine the extraction characteristics of gagatan harimau leaves using conventional solvents and *Deep Eutectic Solvents* (DES). The conventional solvents used were ethanol, ethyl acetate, and n-hexane, while the DES solvents consisted of DES I and DES II. This research was conducted experimentally through simplicia preparation, simplicia characterization, phytochemical screening, DES viscosity testing, and FTIR analysis.

The simplicia characterization showed a water content of 7.99%, water-soluble extract content of 21.63%, ethanol-soluble extract content of 18.03%, total ash content of 7.71%, and acid-insoluble ash content of 2.70%. Phytochemical screening showed positive results for flavonoids, saponins, tannins, alkaloids, and steroids. The viscosity test showed that DES I had a viscosity of 83.5 mPs and DES II had 19.2 mPs. FTIR analysis showed differences in functional groups in each extract, indicating that solvent type affected the characteristics of extracted compounds. Ethanol tended to extract polar to semi-polar compounds, ethyl acetate extracted semi-polar compounds, while n-hexane mostly extracted nonpolar compounds.

Keywords: *Paraboea leuserensis*, gagatan harimau, DES, conventional solvent, FTIR