

**PROGRAM STUDI SARJANA FARMASI
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Judul : Analisis Rendemen dan Skrining Fitokimia Hasil Ekstraksi Berdasarkan Variasi Ukuran Serbuk Simplisia Daun Pacing (*Costus spicatus* (Jacq.) Sw.)

ABSTRAK

Tanaman pacing (*Costus spicatus* (Jacq.) Sw.) merupakan tanaman obat yang tergolong dalam suku *Zingiberaceae*. Tanaman ini umumnya digunakan sebagai tanaman hias oleh masyarakat. Informasi tentang tanaman pacing sebagai obat tradisional masih terbatas dikenal masyarakat. Sehingga diperlukan penelitian untuk menginformasikan kepada masyarakat terkait manfaat tanaman pacing sebagai obat. Penelitian terhadap simplisia tanaman pacing sudah dilakukan. Tujuan penelitian ini berfokus terhadap analisis persen rendemen dan skrining fitokimia dari hasil ekstraksi simplisia daun pacing dengan cara memvariasikan ukuran serbuk simplisianya. Sampel tanaman yang dipilih pada penelitian ini adalah daunnya. Adapun tahapan penelitian yang dilakukan terdiri dari persiapan sampel, identifikasi tanaman, pengamatan makroskopik, pembuatan simplisia, pembuatan variasi serbuk simplisia, ekstraksi, evaporasi, penentuan rendemen dan uji fitokimia. Perolehan ekstrak dilakukan dengan cara ekstraksi simplisia dengan metode maserasi menggunakan pelarut etanol 96% selama 3 hari. Ekstrak pekat diperoleh dengan cara menguapkan pelarut (evaporasi) menggunakan penangas air (*water bath*). Hasil penelitian menunjukkan persentase rendemen ekstrak etanol daun pacing terbesar diperoleh dari simplisia dengan ukuran serbuk mesh 100 yaitu 10,58%. Berdasarkan hasil skrining fitokimianya seluruh variasi ukuran serbuk simplisia positif memiliki senyawa alkaloid, flavonoid, tanin, saponin dan steroid.

Kata Kunci : Daun Pacing, Maserasi, Serbuk Simplisia, Persen Rendemen, Fitokimia

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Title : *Yield Analysis and Phytochemical Screening of Extraction Results Based On Variations in the Size of Pacing Leaf Powder (Costus spicatus (Jacq.) Sw.)*

ABSTRACT

Pacing plant (Costus spicatus (Jacq.) Sw.) is a medicinal plant belonging to the Zingiberaceae family. This plant is commonly used as an ornamental plant by the community. Information about pacing plant as a traditional medicine is still limited among the community. Therefore, research is needed to inform the community about the benefits of pacing plant as a medicine. Research on pacing plant simplisia has been conducted. The purpose of this study focused on analyzing the percentage yield and phytochemical screening of the extraction results of pacing leaf simplisia by varying the size of the simplisia powder. The plant sample selected for this study was the leaves. The stages of the research consisted of sample preparation, plant identification, macroscopic observation, simplisia preparation, simplisia powder variation preparation, extraction, evaporation, yield determination, and phytochemical testing. The extract was obtained by macerating the crude drug using 96% ethanol solvent for 3 days. The concentrated extract was obtained by evaporating the solvent using a water bath. The results showed that the highest percentage of ethanol extract yield from pacing leaves was obtained from crude drug powder with a mesh size of 100, which was 10.58%. Based on the phytochemical screening results, all variations of crude drug powder sizes were positive for alkaloids, flavonoids, tannins, saponins, and steroids.

Keywords : Leaves Pacing, Maceration, Powder Simplisia, Percentage Yield, Phytochemistry