

ABSTRACT

Nabilla Kamilatunnisa. B. 1710231. Chemical Characteristics of Dayak Onion (*Eleutherine palmifolia* (L.) Merr) Extract with Pressurized Liquid Extraction Method. Under the guidance of Rosy Hutami and Mardiah.

Dayak onion (*Eleutherine palmifolia* (L.) Merr) is one of the many plants that thrive in the Kalimantan area which is widely used as traditional medicine to prevent and cure various diseases. One of the processes to obtain the active compounds is through the extraction process. The aim of the study was to characterize the Dayak onion extract extracted by the Pressurized Liquid Extraction method. The method used was factorial RAL (Completely Randomized Design), namely the type of preparation and temperature with two levels of treatment, namely the preparation of fresh and dry Dayak onions and temperatures of 100°C and 70°C. The results of the analysis showed that the type of preparation had an effect ($p < 0.05$) on the moisture content, total phenol content and total flavonoids of the Dayak onion extract. Temperature had an effect ($p < 0.05$) on the total phenol and total flavonoid content of the Dayak onion extract. The interaction of the type of preparation and temperature had no effect ($p > 0.05$) on the yield of the Dayak onion extract. The method chosen based on the highest total phenol and total flavonoid content was the type of wet Dayak onion preparation which was extracted using a temperature of 70°C which had a total phenol content of 2472.14 mg GAE/100 g and a total flavonoid content of 282.75 mg/g.

Keywords: Dayak Onion, Pressurized Liquid Extraction, Phenol and Flavonoid Levels

ABSTRAK

Nabilla Kamilatunnisa. B. 1710231. Karakteristik Kimia Ekstrak Bawang Dayak (*Eleutherine palmifolia* (L.) Merr) dengan Metode Ekstraksi *Pressurized Liquid Extraction*. Dibawah bimbingan Rosy Hutami dan Mardiah.

Bawang Dayak (*Eleutherine palmifolia* (L.) Merr) merupakan salah satu tanaman yang banyak tumbuh subur di daerah Kalimantan yang banyak digunakan sebagai obat tradisional untuk mencegah dan menyembuhkan berbagai macam penyakit. Salah satu proses untuk mendapatkan senyawa aktifnya adalah melalui proses ekstraksi. Penelitian bertujuan untuk mengkarakterisasi ekstrak bawang dayak yang diekstrak dengan metode ekstraksi *Pressurized Liquid Extraction*. Metode yang digunakan adalah RAL (Rancangan Acak Lengkap) faktorial, yaitu jenis sediaan dan suhu dengan dua taraf perlakuan, yaitu sediaan bawang dayak segar dan kering dan suhu 100°C dan 70°C. Hasil analisis menunjukkan bahwa jenis sediaan berpengaruh ($p < 0,05$) terhadap kadar air, kadar total fenol dan total flavonoid ekstrak bawang dayak. Suhu berpengaruh ($p < 0,05$) terhadap kadar total fenol dan total flavonoid ekstrak bawang dayak. Interaksi jenis sediaan dan suhu tidak berpengaruh ($p > 0,05$) terhadap rendemen ekstrak bawang dayak. Metode terpilih berdasarkan kadar total fenol dan total flavonoid tertinggi adalah perlakuan jenis sediaan bawang dayak segar yang diekstrak menggunakan suhu 70°C yang memiliki kadar total fenol sebesar 2472,14 mg GAE/100 g dan kadar total flavonoid sebesar 282,75 mg/g.

Kata Kunci: Bawang Dayak, Ekstraksi *Pressurized Liquid Extraction*, Kadar Fenol dan Flavonoid