

Universitas Ngudi Waluyo
Program Studi Farmasi Fakultas Kesehatan
Skripsi, Januari, 2023
Arswinda Ayu Kumala Dewi
051191153

PENGARUH METODE PENGERINGAN SIMPLISIA TERHADAP KADAR FLAVONOID TOTAL DALAM EKSTRAK JAHE MERAH

ABSTRAK

Latar Belakang: Jahe merah merupakan salah satu dari beberapa macam obat herbal yang banyak digunakan masyarakat karena memiliki kandungan zat aktif salah satunya yaitu flavonoid. Simplisia jahe merah dibuat dengan mengeringkan rimpang segar yang sudah dirajang dengan metode pengeringan yang berbeda. Tujuan dilakukannya penelitian ini untuk mengetahui pengaruh metode pengeringan terhadap kadar flavonoid total pada ekstrak jahe merah dan mengetahui metode pengeringan simplisia yang menghasilkan kadar flavonoid total paling tinggi.

Metode: Sampel jahe merah berasal dari daerah Suruh, Kabupaten Semarang. Proses pengeringan dilakukan dengan metode pengeringan dibawah matahari secara langsung (**PL**), pengeringan dibawah sinar matahari tidak langsung dengan ditutup kain hitam (**PH**), pengeringan dengan cara diangin-anginkan (**PA**) dan pengeringan menggunakan alat oven suhu 50°C (**PO**). Penyarian dilakukan dengan metode maserasi dilanjutkan remaserasi. Penetapan kadar flavonoid total dilakukan menggunakan pembanding kuersetin dengan metode Spektrofotometri UV-Vis.

Hasil: Penelitian ini memperoleh hasil bahwa kadar flavonoid total ekstrak jahe merah dengan metode pengeringan (**PL**) sebesar $60,287 \pm 2,173$ mg QE/g, metode pengeringan (**PH**) sebesar $21,219 \pm 1,353$ mg QE/g, pengeringan (**PA**) sebesar $86,810 \pm 3,241$ mg QE/g dan pengeringan (**PO**) sebesar $38,960 \pm 1,353$ mg QE/g.

Simpulan: Berdasarkan hasil uji SPSS menunjukkan bahwa metode pengeringan memberikan hasil pengaruh yang nyata terhadap hasil pengukuran kadar flavonoid total ekstrak jahe merah dan kadar flavonoid total paling tinggi dengan metode pengeringan diangin-anginkan.

Kata Kunci: Jahe Merah, Metode Pengeringan, Flavonoid Total

Ngudi Waluyo University
Study Program of Pharmacy, Faculty of Health
Final Project, January 2023
Arswinda Ayu Kumala Dewi
051191153

EFFECT OF SIMPLICIA DRYING METHOD ON TOTAL FLAVONOID CONTENT IN RED GINGER

ABSTRACT

Background: Red ginger is one of several kinds of herbal medicines that are widely used by the public because it contains active substances, one of which is flavonoids. Red ginger simplicia is made by drying the chopped fresh rhizomes using different drying methods. The purpose of this study was to determine the effect of the drying method on total flavonoid content in red ginger extract and to determine the simplicial drying method which produced the highest total flavonoid content.

Methods: Red ginger were obtained from Suruh area, Semarang Regency. The drying process is carried out by drying under direct sunlight (**PL**), drying under indirect sunlight by covering with a black cloth (**PH**), drying by air (**PA**) and drying using an oven at 50°C (**PO**). The screening was carried out using maceration method followed by remaceration. Determination of total flavonoid content was carried out using comparator quercetin with UV-Vis Spectrophotometry method.

Results: This study found the total flavonoid content of red ginger extract with the drying method (**PL**) was 60.287 ± 2.173 mg QE/g, the drying method (**PH**) was 21.219 ± 1.353 mg QE/g, drying (**PA**) was 86.810 ± 3.241 mg QE/g and drying (**PO**) of 38.960 ± 1.353 mg QE/g.

Conclusion: Based on the results of the SPSS test, it showed that the drying method yielded significant effect in the results of measurements of the total flavonoid content in red ginger extract and the highest total flavonoid content with the air-dried method.

Keywords: Red Ginger, Drying Method, Total Flavonoids