

**Universitas Ngudi Waluyo**

**Program Studi Farmasi**

Ulvia Surya Ningsih\*

Fania Putri L \*\* dan Abdul Roni\*\*\*

Skripsi, Agustus 2021

**PENGARUH METODE EKSTRAKSI TERHADAP MUTU EKSTRAK BIJI  
CARICA (*Carica pubescens Lenne et Koch.*)**

**INTISARI**

**Latar Belakang :** Biji Carica (*Carica pubescens Lenne et Koch*) berpotensi untuk dikembangkan kembali sebagai bahan baku obat, maka mutu dan kualitas bahan perlu ditingkatkan melalui penelitian dan pengembangan. Efektifitas metode ekstraksi sangat bergantung pada kondisi percobaan yang digunakan seperti jenis pelarut, sampel yang digunakan, lamanya waktu ekstraksi dan jenisnya. Cara ekstraksi sangat mempengaruhi efek terapi dari simplisia.

**Tujuan :** Untuk mengidentifikasi pengaruh metode ekstraksi biji carica terhadap nilai rendemen, kadar air, kadar sari larut air, kadar sari larut etanol dan mengidentifikasi kandungan senyawa alkaloid dan flavonoid ekstrak biji Carica.

**Metode :** Desain penelitian dilakukan adalah eksperimental dengan analisis secara deskriptif. Biji carica yang telah menjadi serbuk kemudian diekstraksi menggunakan metode maserasi dan metode refluks. Hasil rendemen, penetapan kadar air, penetapan kadar sari larut air, penetapan kadar sari larut etanol dan penetapan senyawa metabolit sekunder kemudian di analisa dan disajikan dalam bentuk deskripsi tabel.

**Hasil :** Metode maserasi biji carica (*Carica pubescens Lenne et Koch*) menghasilkan rendemen sebesar 7,26% dan metode refluks menghasilkan rendemen sebesar 8,94%. Pada metode maserasi biji carica (*Carica pubescens Lenne et Koch.*) diperoleh diperoleh nilai kadar air sebesar 3,34% sedangkan pada metode refluks nilai kadar air sebesar 4%. Pada metode maserasi diperoleh nilai kadar sari larut air yaitu 8% sedangkan pada metode refluks nilai kadar sari larut air yaitu 12%. Pada metode maserasi nilai kadar sari larut etanol adalah 30% sedangkan metode refluks nilai kadar sari larut etanol adalah 12,67%. Pada metode maserasi dan metode refluks ekstrak biji carica (*Carica pubescens Lenne et Koch.*) mengandung senyawa alkaloid dan flavonoid.

**Simpulan :** Berdasarkan hasil penelitian dapat disimpulkan bahwa perbedaan metode ekstraksi dapat mempengaruhi persen (%) nilai rendemen, nilai kadar air, nilai kadar sari larut air dan nilai kadar sari larut etanol ekstrak biji carica (*Carica pubescens Lenne et Koch.*)

**Kata Kunci :** Carica, Biji, Mutu Ekstrak, Metode maserasi

\* : Mahasiswa

\*\* : Dosen Pembimbing Utama

\*\*\* : Dosen Pembimbing Pendamping

Ngudi Waluyo University  
Pharmacy Study Program  
Ulvia Surya Ningsih\*  
Fania Putri L \*\* dan Abdul Roni\*\*\*  
Thesis, August 2021

## THE EFFECT OF EXTRACTION METHOD ON THE QUALITY OF CARICA SEED EXTRACT (*Carica pubescens* Lenne et Koch.)

### ABSTRACT

**Background :** Carica seeds (*Carica pubescens* Lenne et Koch) have the potential to be redeveloped as medicinal raw materials, so the quality and quality of the ingredients need to be improved through research and development. The effectiveness of the extraction method is highly dependent on the experimental conditions used such as the type of solvent, the sample used, the length of extraction time and the type. The method of extraction greatly affects the therapeutic effect of simplicia.

**Objective:** To identify the effect of the extraction method on Carica seeds on yield value, water content, water soluble extract content, ethanol soluble extract content and identify the content of alkaloids and flavonoid compounds in Carica seed extract.

**Methods:** The research design was experimental with descriptive analysis. Carica seeds that have been powdered are then extracted using the maceration method and the reflux method. The results of yield, determination of water content, determination of water soluble extract content, determination of ethanol soluble extract content and determination of secondary metabolite compounds were then analyzed and presented in the form of table descriptions.

**Results :** The maceration method of carica seeds (*Carica pubescens* Lenne et Koch) produced a yield of 7.26% and the reflux method produced a yield of 8.94%. In the carica seed maceration method (*Carica pubescens* Lenne et Koch.) the water content value was 3.34%, while the reflux method was 4%. In the maceration method, the value of the water soluble extract content is 8%, while in the reflux method the value of the water soluble essence is 12%. In the maceration method, the ethanol soluble extract value was 30% while the reflux method the ethanol soluble extract value was 12.67%. In the maceration method and reflux method, carica seed extract (*Carica pubescens* Lenne et Koch.) contains alkaloids and flavonoids.

**Conclusion:** Based on the results of the study, it can be concluded that the difference in extraction methods can affect the percent (%) yield value, water content value, water soluble extract value and ethanol soluble extract value of carica seed extract (*Carica pubescens* Lenne et Koch.)

**Keywords** : Carica, Seed, Extract Quality, Maceration Method  
\* : Student  
\*\* : Main Advisory Lecturer  
\*\*\* : Assistant Advisory Lecturer  
pma