

## ABSTRAK

Daun sirih merah (*Piper crocatum* Ruiz & Pav.) merupakan salah satu obat tradisional yang banyak digunakan oleh masyarakat Indonesia dan diketahui memiliki khasiat sebagai antiinflamasi. Daun sirih merah yang hendak dikembangkan menjadi fraksi etil asetat ekstrak metanol sebagai bahan baku obat herbal terstandar dan fitofarmaka harus dilakukan proses standardisasi. Penelitian ini bertujuan untuk mengetahui hasil parameter standardisasi fraksi etil asetat ekstrak metanol daun sirih merah berdasarkan Farmakope Herbal Indonesia edisi II. Penelitian ini merupakan penelitian non eksperimental. Tahap penelitian yang dilakukan meliputi determinasi, pengumpulan bahan, pembuatan simplisia, pembuatan ekstrak metanol, pembuatan fraksi etil asetat dan penentuan parameter standardisasi yang meliputi parameter spesifik dan parameter non spesifik.

Hasil penentuan parameter spesifik meliputi identitas (tata nama) berupa fraksi etil asetat ekstrak metanol daun sirih merah (*Piper crocatum* Ruiz & Pav.), organoleptik berupa warna hijau kecoklatan, berbentuk kental dan bau khas, lalu identifikasi dan penetapan kandungan senyawa kimia. Identifikasi senyawa kimia menghasilkan nilai  $R_f$  sebesar 0,8. Senyawa kimia yang terkandung dalam fraksi etil asetat ekstrak metanol adalah flavonoid kuersetin dengan kadar sebesar 44,7276%. Selanjutnya, hasil uji parameter non spesifik meliputi susut pengeringan 3,452%, kadar air 6,327%, kadar abu total 1,0058% kadar abu tidak larut asam 0,0264%, lalu cemaran mikroba  $<10^1$  koloni/g dan cemaran kapang khamir  $<10^1$  koloni/g. Hasil standardisasi fraksi etil asetat ekstrak metanol daun sirih merah memenuhi parameter standardisasi Farmakope Herbal Indonesia II dan Peraturan BPOM Nomor 32 Tahun 2019 tentang Persyaratan Keamanan dan Mutu Obat Tradisional.

**Kata kunci:** Daun sirih merah, fraksi etil asetat, parameter spesifik, parameter non spesifik

## ABSTRACT

Red betel leaf (*Piper crocatum* Ruiz & Pav.) is one of the traditional medicines that is widely used by Indonesian people and is known to have anti-inflammatory properties. Red betel leaf which is to be developed into the ethyl acetate fraction of methanol extract as raw material for standardized herbal medicines and phytopharmaca must undergo a standardization process. This study aims to determine the parameter results of standardization of the ethyl acetate fraction of the methanol extract of red betel leaves based on the Indonesian Herbal Pharmacopoeia II edition. This research is a non-experimental research. The stages of the research carried out included determination, collection of materials, preparation of simplicia, preparation of methanol extract, preparation of ethyl acetate fraction and determination of standardization parameters which included specific parameters and non specific parameters.

The results of determining specific parameters include identity (nomenclature) in the form of the ethyl acetate fraction of methanol extract of red betel leaves (*Piper crocatum* Ruiz & Pav.), organoleptic in the form of brownish green color, viscous shape and characteristic odor, then identification and determination of chemical compound content. Identification of chemical compounds resulted in an Rf value of 0,8. The chemical compound contained in the ethyl acetate fraction of the methanol extract was a quercetin flavonoid with a quercetin content of 44.7276%. Furthermore, the non-specific parameter test results included drying shrinkage of 3.452%, moisture content of 6.327%, total ash content of 1.0058 % acid insoluble ash content was 0.0264%, then microbial contamination  $<10^1$  colonies/g and yeast contamination of  $<10^1$  colonies/g. The results of standardization of the ethyl acetate fraction of the methanol extract of red betel leaves met the parameters of the Indonesian Herbal Pharmacopoeia II standardization and BPOM regulation number 32 of 2019 concerning safety and quality requirements for traditional medicines.

**Keywords:** Red betel leaf, ethyl acetate fraction, specific parameters, non specific parameters