

## **PENGARUH CARA EKSTRAKSI TERHADAP RENDEMEN DAN KUALITAS MINYAK KEMIRI (*Aleurites moluccana* (L.) Wild)**

Oleh:

Amanda Farahani Luthfia<sup>1</sup>

Rini Pujiarti<sup>2</sup>

### **INTISARI**

Tanaman kemiri (*Aleurites moluccana* (L.) Wild) merupakan Hasil Hutan Bukan Kayunya (HHBK), dimana biji kemiri dapat menghasilkan minyak lemak. Ekstraksi biji kemiri dapat dilakukan dengan berbagai metode. Agar diperoleh minyak kemiri dengan hasil yang maksimal, maka perlu diketahui cara ekstraksi yang paling tepat. Penelitian ini menggunakan ekstraksi dengan pra perlakuan bahan dan lama penyimpanan bubuk kemiri untuk mengetahui pengaruhnya terhadap rendemen dan kualitas minyak kemiri yang dihasilkan. Pra perlakuan bahan yang dilakukan adalah tanpa perlakuan, pemanggangan dan perebusan. Sementara untuk lama penyimpanan bubuk kemiri dilakukan penyimpanan selama  $\pm 24$  jam dan tanpa penyimpanan. Parameter yang diuji meliputi rendemen, bobot jenis, indeks bias, kadar air, bilangan penyabunan, dan asam lemak bebas. Analisis data dilakukan dengan *two way* Anova dan dilanjutkan dengan uji *post hoc*. Hasil analisis menunjukkan bahwa pra perlakuan bahan dan lama penyimpanan bubuk kemiri berpengaruh pada rendemen, bobot jenis, indeks bias, kadar air dan asam lemak bebas. Rendemen minyak kemiri tertinggi diperoleh pada kombinasi faktor pra perlakuan tanpa pemanasan–penyimpanan 24 jam. Sedangkan, kualitas minyak kemiri hanya memenuhi Standar SNI Minyak Kemiri pada parameter asam lemak bebas. Parameter bobot jenis, indeks bias, kadar air dan bilangan penyabunan tidak memenuhi SNI atau beberapa parameter sedikit di bawah atau di atas SNI.

**Kata kunci: minyak kemiri, pra perlakuan, lama penyimpanan, bubuk kemiri**

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<sup>1</sup>Mahasiswa Program Studi Pengelolaan Hutan, Fakultas Sekolah Vokasi, Universitas Gadjah Mada

<sup>2</sup>Staf Pengajar Fakultas Kehutanan, Universitas Gadjah Mada

## **EFFECT OF EXTRACTION METHOD ON YIELD AND QUALITY OF CANDLENUT OIL (*Aleurites moluccana* (L.) Wild)**

Oleh:

Amanda Farahani Luthfia<sup>1</sup>

Rini Pujiarti<sup>2</sup>

### **ABSTRACT**

Candlenut plants (*Aleurites moluccana*) are Non-Timber Forest Products (NTFPs), where candlenut seeds can produce fatty oil. Candlenut seed extraction can be done by various methods. In order to obtain candlenut oil with maximum results, it is necessary to know the most appropriate extraction method. This study uses extraction with pre-treatment of materials and long storage of candlenut porridge to determine its effect on the yield and quality of candlenut oil produced. The pre-treatment of materials carried out is without treatment, roasting and boiling. Meanwhile, for the storage duration of candlenut porridge, storage was carried out for  $\pm$  24 hours and without storage. Parameters tested included yield, specific gravity, refractive index, moisture content, saponification number, and free fatty acids. Data analysis was done with two way Anova and continued with a post hoc test. The results of the analysis showed that the pre-treatment of ingredients and the length of storage of candlenut porridge had an effect on yield, specific gravity, refractive index, moisture content, and free fatty acids. The highest candlenut oil yield was obtained in the combination of pre-treatment factors without heating-storage for 24 hours. Meanwhile, the quality of candlenut oil only meets the SNI of candlenut oil in the parameter of free fatty acid. The parameters of specific gravity, refractive index, moisture content and saponification number did not meet the SNI or some parameters were slightly below or above the SNI.

**Keywords: candlenut oil, pre-treatment, long storage, candlenut porridge**

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<sup>1</sup>Student of Forest Management Program, Faculty of Vocational School, Gadjah Mada University

<sup>2</sup>Lecturer of Forest Management Program, Faculty of Forestry, Gadjah Mada University