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**Kadar Ekstraktif dan Aktivitas Antioksidan Kulit Kayu Masohi (Cryptocarya massoy) di Hutan Alam PT
Jati Dharma Indah Berdasarkan Metode Ekstraksi dan Pelarut**
Arnaya Khairi Rapul Hanisi, Sigit Sunarta; Rizki Arisandi
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KADAR EKSTRAKTIF DAN AKTIVITAS ANTIOKSIDAN KULIT KAYU MASOHI (*Cryptocarya massoy*) DI HUTAN ALAM PT JATI DHARMA INDAH BERDASARKAN METODE EKSTRAKSI DAN PELARUT

Arnaya Khairi Rapul Hanisi[1], Sigit Sunarta[2], Rizki Arisandi[3]

INTISARI

Masohi (*Cryptocarya massoy* (Oken) Kosterm.) merupakan salah satu jenis tumbuhan dengan penyebaran yang relatif terbatas di Indonesia terutama di wilayah Papua, yang berpotensi sebagai sumber senyawa bioaktif karena mengandung berbagai metabolit sekunder yang berperan sebagai antioksidan alami. Namun, informasi mengenai pengaruh metode ekstraksi dan jenis pelarut terhadap kadar ekstraktif dan aktivitas antioksidannya masih terbatas. Penelitian ini bertujuan untuk menganalisis kadar ekstraktif dan aktivitas antioksidan kulit kayu masohi berdasarkan tiga metode ekstraksi (maserasi, sokletasi, refluks) dan tiga jenis pelarut (n-heksana, etil asetat, etanol) menggunakan rancangan percobaan faktorial dalam tiga kali ulangan. Kadar ekstraktif ditentukan berdasarkan persentase zat terlarut yang diperoleh setelah ekstraksi sedangkan aktivitas antioksidan ditentukan menggunakan metode peredaman radikal bebas DPPH, dinyatakan dengan penentuan nilai IC_{50} pada ekstrak etanol yang menunjukkan aktivitas antioksidan tertinggi. Data dianalisis menggunakan ANOVA dilanjutkan uji lanjut Duncan pada taraf signifikansi 5%.

Hasil penelitian menunjukkan bahwa metode ekstraksi dan jenis pelarut berpengaruh nyata terhadap kadar ekstraktif dan aktivitas antioksidan kulit kayu masohi. Kadar ekstraktif berkisar 3,34–12,58%, kadar fenolat total 6,70–185,24 mg GAE/g, kadar flavonoid total 4,22–15,14 mg QE/g, kadar flavanol total 34,27–194,94 mg CE/g, dan nilai IC_{50} 424,76–8726,06 ppm. Kadar ekstraktif tertinggi diperoleh dari kombinasi sokletasi-etanol (12,58 ± 0,10%) dan nilai IC_{50} terendah dihasilkan oleh metode sokletasi pada ekstrak etanol (432,23 ± 7,78 ppm). Secara keseluruhan, perlakuan sokletasi dengan pelarut etanol memberikan hasil terbaik untuk memperoleh ekstraktif dan aktivitas antioksidan dari kulit kayu masohi.

Kata Kunci: *Cryptocarya massoy*, aktivitas antioksidan, kadar ekstraktif, kulit kayu masohi, metode ekstraksi, pelarut.

[1] Mahasiswa Departemen Teknologi Hasil Hutan, Fakultas Kehutanan UGM
[2] Staf Pengajar Departemen Teknologi Hasil Hutan, Fakultas Kehutanan UGM
[3] Staf Pengajar Departemen Teknologi Hasil Hutan, Fakultas Kehutanan UGM

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EXTRACTIVE CONTENT AND ANTIOXIDANT ACTIVITY OF MASOHI (*Cryptocarya massoy*) BARK FROM THE NATURAL FOREST OF PT JATI DHARMA INDAH BASED ON EXTRACTION METHOD AND SOLVENT

Arnaya Khairi Rapul Hanisi[1], Sigit Sunarta[2], Rizki Arisandi[3]

ABSTRACT

Masohi (*Cryptocarya massoy* (Oken) Kosterm.) is a plant species with a relatively limited distribution in Indonesia, mainly in Papua, and has potential as a source of bioactive compounds because it contains various secondary metabolites that act as natural antioxidants. However, information on the effects of extraction method and solvent type on the extractive content and antioxidant activity of its bark remains limited. This study aimed to analyze the extractive content and antioxidant activity of masohi bark using three extraction methods (maceration, Soxhlet extraction, and reflux) and three solvents (n-hexane, ethyl acetate, and ethanol) in a factorial design with three replications. Extractive content was determined as the percentage of dissolved material obtained after extraction, while antioxidant activity was assessed using the DPPH free radical scavenging assay and expressed as IC50 values of the ethanol extracts, which showed the highest antioxidant activity. Data were analyzed using ANOVA followed by Duncan's multiple range test at the 5% significance level.

The results showed that extraction method and solvent type significantly affected the extractive content and antioxidant activity of masohi bark. Extractive content ranged from 3.34 to 12.58%, total phenolic content from 6.70 to 185.24 mg GAE/g, total flavonoid content from 4.22 to 15.14 mg QE/g, total flavanol content from 34.27 to 194.94 mg CE/g, and IC50 values from 424.76 to 8726.06 ppm. The highest extractive content was obtained from the Soxhlet–ethanol combination (12.58 ± 0.10%), and the lowest IC50 value was produced by Soxhlet extraction of the ethanol extract (432.23 ± 7.78 ppm). Overall, Soxhlet extraction with ethanol gave the best results for obtaining extractives and antioxidant activity from masohi bark.

***Keywords*:** *Cryptocarya massoy, antioxidant activity, extraction method, extractive content, masohi bark, solvent.*

[1] Student of Forest Products Technology Department, Faculty of Forestry UGM
[2] Lecturer of Forest Products Technology Department, Faculty of Forestry UGM
[3] Lecturer of Forest Products Technology Department, Faculty of Forestry UGM