

**IDENTIFIKASI GOLONGAN SENYAWA FRAKSI ETIL ASETAT DAN
AIR DAUN GAHARU (*Aquilaria malaccensis* L.)
SERTA UJI AKTIVITAS ANTIHIPERURISEMIA SECARA IN VITRO**

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ABSTRAK

Daun gaharu (*Aquilaria malaccensis* L.) dikenal memiliki berbagai aktivitas farmakologis yang menjadikannya sebagai salah satu tanaman obat tradisional yang berkhasiat. Penelitian ini **bertujuan** untuk mengetahui golongan senyawa yang terdapat dalam fraksi etil asetat dan air dari daun gaharu (*Aquilaria malaccensis* L.) serta mengetahui aktivitas daun gaharu terhadap inhibisi enzim xantin oksidase. **Metode**, daun gaharu diekstraksi menggunakan metode maserasi dengan pelarut etanol 96%. Ekstrak kental kemudian difraksinasi menggunakan pelarut n-heksan, etil asetat, dan air. Fraksi etil asetat dan fraksi air diidentifikasi dengan menggunakan alat FTIR. Kemudian dilakukan uji aktivitas antihiperurisemia dengan metode inhibisi enzim xantin oksidase. **Hasil** penelitian menunjukkan bahwa fraksi etil asetat dan air diduga terdapat golongan senyawa aktif seperti flavonoid. Uji aktivitas in vitro menunjukkan bahwa fraksi etil asetat memiliki aktivitas inhibisi terhadap enzim xantin oksidase yang lebih tinggi dibandingkan fraksi air, dengan nilai % inhibisi masing-masing sebesar 92,04% dan 74,38%.

Kata Kunci: *Aquilaria malaccensis*, daun gaharu, fraksinasi, xantin oksidase, antihiperurisemia.

**IDENTIFICATION OF THE GROUP OF COMPOUNDS OF ETHYL
ACETATE FRACTION AND AGARWOOD LEAF WATER (*Aquilaria
malaccensis* L.) AS WELL AS IN VITRO ANTIHYPERURICEMIA
ACTIVITY TEST**

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ABSTRACT

Agarwood leaves (*Aquilaria malaccensis* L.) are known to have various pharmacological activities that make it one of the traditional medicinal plants that are efficacious. This study **aims to** determine the group of compounds contained in the fraction of ethyl acetate and water from agarwood leaves (*Aquilaria malaccensis* L.) and to determine the activity of agarwood leaves on the inhibition of the enzyme xanthine oxidase. **Method**, agarwood leaves were extracted using the maceration method with a 96% ethanol solvent. The viscous extract is then fractionated using n-hexane solvent, ethyl acetate, and water. The ethyl acetate fraction and the water fraction were identified using the FTIR tool. Then an antihyperuricemia activity test was carried out using the xanthine oxidase enzyme inhibition method. **The results of** the study show that the ethyl acetate and water fractions are suspected to have a group of active compounds such as flavonoids. In vitro activity tests showed that the ethyl acetate fraction had higher inhibition activity against the xanthine oxidase enzyme compared to the water fraction, with inhibition % values of 92.04% and 74.38%, respectively.

Keywords: *Aquilaria malaccensis*, agarwood leaf, fractionation, xanthine oxidase, antihyperuricemia.