

Abstract

*Hyperuricemia is a metabolic disorder caused by elevated serum uric acid levels that may progress to gout and other complications. Although synthetic drugs such as allopurinol are effective, their long-term use may cause adverse effects, thus alternative therapies derived from natural products are needed. This study aimed to evaluate the antihyperuricemic activity of the ethanol extract of kedondong pagar leaves (*Lannea coromandelica* (Houtt.) Merr.) in male white rats (*Rattus norvegicus*). An *in vivo* experimental study was conducted using potassium oxonate-induced hyperuricemic rats. The animals were divided into five groups: negative control (0.5% CMC), positive control (allopurinol 10 mg/kgBW), and three treatment groups receiving the ethanol extract at doses of 100, 200, and 300 mg/kgBW. Serum uric acid levels were measured before induction, after induction, and hourly up to six hours following treatment. Phytochemical screening revealed the presence of flavonoids, saponins, tannins, steroids/triterpenoids, and glycosides in the extract. The results demonstrated that the ethanol extract of *Lannea coromandelica* leaves significantly reduced serum uric acid levels in a dose-dependent manner, with the 300 mg/kgBW dose showing the greatest effect and approaching the efficacy of allopurinol. In conclusion, the ethanol extract of kedondong pagar leaves has potential as a natural antihyperuricemic agent.*

Keywords: Hyperuricemia, *Lannea coromandelica*, ethanol extract, uric acid, rat.

Abstrak

*Hiperurisemia merupakan gangguan metabolik akibat peningkatan kadar asam urat dalam darah yang dapat berkembang menjadi gout dan komplikasi lainnya. Penggunaan obat sintetik seperti allopurinol efektif tetapi berpotensi menimbulkan efek samping, sehingga diperlukan alternatif terapi berbasis bahan alam. Penelitian ini bertujuan untuk mengevaluasi efektivitas antihiperurisemia ekstrak etanol daun kedondong pagar (*Lannea coromandelica* (Houtt.) Merr.) pada tikus putih jantan (*Rattus norvegicus*). Penelitian dilakukan secara eksperimental *in vivo* menggunakan tikus yang diinduksi hiperurisemia dengan kalium oksonat. Hewan uji dibagi menjadi lima kelompok, yaitu kontrol negatif (CMC 0,5%), kontrol positif (allopurinol 10 mg/kgBB), serta tiga kelompok perlakuan ekstrak etanol daun kedondong pagar dosis 100, 200, dan 300 mg/kgBB. Kadar asam urat darah diukur sebelum induksi, setelah induksi, dan setiap jam hingga enam jam setelah pemberian perlakuan. Hasil skrining fitokimia menunjukkan bahwa ekstrak mengandung flavonoid, saponin, tanin, steroid/triterpenoid, dan glikosida. Pengujian efektivitas menunjukkan bahwa ekstrak etanol daun kedondong pagar mampu menurunkan kadar asam urat secara dosis-respons, dengan dosis 300 mg/kgBB memberikan efek penurunan terbesar dan mendekati efektivitas allopurinol. Disimpulkan bahwa ekstrak etanol daun kedondong pagar berpotensi sebagai kandidat antihiperurisemia berbasis bahan alam.*

Kata kunci: hiperurisemia, *Lannea coromandelica*, ekstrak etanol, asam urat, tikus putih.