

ABSTRAK

Nama : Melva Novriana Saragih
Program Studi : Fakultas Farmasi
Judul : Analisis Efektivitas Sediaan Sirup Ekstrak Daun Murbei
(*Morus alba* L.) Terhadap Penurunan Kadar Asam Urat Pada
Mencit Jantan (*Mus Musculus*)

Penyakit asam urat merupakan penyakit degeneratif yang menyerang persendian. Prevalensinya terus meningkat seiring dengan bertambahnya usia. Pengobatan asam urat bertujuan untuk menghilangkan gejala inflamasi dan mengurangi kekambuhan. Obat sintesis yang ada, salah satunya adalah alupurinol. Alupurinol memiliki efek samping bila digunakan dalam jangka panjang, yaitu menyebabkan gagal hati, hepatitis, diare, konstipasi, mual, muntah dan eksim. Ekstrak daun murbei 250 mg/kg BB, 500 mg/kg BB dan 750 mg/kg BB diketahui dapat menurunkan kadar asam urat. Penelitian ini bertujuan mengetahui stabilitas fisik dan efektivitas sirup ekstrak daun murbei 250 mg/kg BB, 500 mg/kg BB dan 750 mg/kg BB dalam menurunkan kadar asam urat. Ekstrak etanol daun murbei diuji fitokimia, dibuat sediaan sirup simplek, dan diperiksa organoleptik, pH, homogenitas dan viskositasnya. Hewan uji yang digunakan 24 ekor mencit jantan, dengan 6 kelompok uji. Mencit diberi makan hati ayam segar hingga hiperurisemia, kemudian diberi sirup ekstrak daun murbei dengan 250 mg/kg BB, 500 mg/kg BB dan 750 mg/kg BB kontrol allopurinol dan Na CMC. Kadar asam urat darah diukur tiap menit ke 60; 90; 120; 150; 180; dan 210. Hasil penelitian menunjukkan sirup ekstrak daun murbei dapat diformulasi dan memiliki stabilitas fisik yang baik, serta sirup ekstrak daun murbei mampu menurunkan kadar asam urat pada dosis 250mg/Kg BB (32%), 500 mg/Kg BB (53%) dan 750 mg/Kg BB (41%), yang tidak berbeda nyata dengan kontrol allopurinol ($p>0.05$).

Kata Kunci: Asam urat, *Morus alba* L, mencit jantan, sirup.

ABSTRACT

Name : Melva Novriana Saragih
Study Program : Faculty of Pharmacy
Title : Effectiveness Analysis of Syrup Mulberry Leaf Extract (Morus alba L.) on Decreasing Uric Acid Level in Male Mice (Mus Musculus)

Gout is a degenerative disease that attacks the joints. The prevalence continues to increase with age. Gout treatment aims to eliminate the symptoms of inflammation and reduce recurrence. There are synthetic drugs, one of which is allupurinol. Alupurinol has side effects when used in the long run, which causes liver failure, hepatitis, diarrhea, constipation, nausea, vomiting and eczema. Mulberry leaf extract 250 mg / kg BW, 500 mg / kg BW and 750 mg / kg BW is known to reduce uric acid levels. This study aims to determine the physical stability and effectiveness of mulberry leaf extract syrup 250 mg / kg BW, 500 mg / kg BW and 750 mg / kg BW in reducing uric acid levels. The ethanol extract of mulberry leaves was tested for phytochemistry, made of simplex syrup preparations, and examined organoleptic, pH, homogeneity and viscosity. Test animals used 24 male mice, with 6 test groups. Mice were fed fresh chicken liver to hyperuricemia, then given mulberry leaf extract syrup with 250 mg / kg BW, 500 mg / kg BW and 750 mg / kg BW allopurinol control and CMC Na. Blood uric acid levels are measured every 60 minutes; 90; 120; 150; 180; and 210. The results showed that mulberry leaf extract syrup can be formulated and has good physical stability, and mulberry leaf extract syrup can reduce uric acid levels at a dose of 250 mg / kg BW (32%), 500 mg / kg BW (53%) and 750 mg / kg BW (41%), which was not significantly different from the allopurinol control ($p < 0.05$).

Keywords: Uric acid, *Morus alba* L, male mice, syrup.