Uji Penghambatan Aktivitas Xantin Oksidase Dan Identifikasi Golongan Senyawa Kimia Dari Fraksi Teraktif Ekstrak Metanol Umbi Tanaman Rumput Teki (Cyperus rotundus Linn.) = Inhibition of xanthine oxidase activity Test and Identification of Chemical Compounds Group From Active Fraction of Methanol Extracts of Nutsedge Grass Tuber (Cyperus rotundus Linn.)

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Abstrak

Xantin oksidase merupakan enzim penting yang mengkatalisis xantin menjadi asam urat dan produksi berlebihan asam urat dapat menyebabkan kondisi hiperurisemia. Penghambatan enzim xantin oksidase dapat menurunkan produksi asam urat. Rumput teki telah dikenal masyarakat sebagai pengobatan tradisional untuk penyakit sendi. Fraksi n-heksana, etil asetat, n-butanol, dan metanol dari umbi Cyperus rotundus Linn. diuji aktivitas penghambatan terhadap xantin oksidase secara in vitro. Serbuk simplisia dimaserasi dengan metanol, kemudian difraksinasi berturut-turut dengan n-heksana, etil asetat, n-butanol, dan metanol. Fraksi etil asetat memiliki nilai IC50 tertinggi yaitu 10,58 g/mL. Pengujian kinetika enzim menunjukkan bahwa fraksi etil asetat memiliki penghambatan kompetitif. Dari hasil identifikasi fitokimia, fraksi etil asetat mengandung glikosida, fenol, dan flavonoid.

.....Xanthine oxidase is an important enzyme that catalyses xanthine to uric acid and the overproduction of uric acid will lead to hyperuricemia. The inhibition of xanthine oxidase can reduced, the production of uric acid. Nut grass had been used by people on traditional medication for joint pain. Fraction of n-hexane, ethyl acetate, n-butanol, and methanol from Cyperus rotundus Linn (Nut Grass) tuber was evaluated for inhibitory activity against xanthine oxidase in vitro. The simplicia powder was macerated by methanol, and then fractionated successively by n-hexane, ethyl acetat, n-butanol, and methanol. Fraction of ethyl acetate had the highest IC50 value of 10,58 g / mL. Kinetic enzyme assay showed that ethyl acetate fraction had competitive inhibitory. From the results of phytochemical identification, the fraction of ethyl acetate contains glycosides, phenols, and flavonoids.