ACTIVITIES OF RED MENIRAN ETHANOL EXTRACT (Phyllanthus urinaria L.) AS ANTIHYPERURICEMIA ON MICE

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Abstract

Hyperuricemia is a condition in which blood uric acid levels exceed normal value. This state may become gout disease. Therefore, a study was conducted to find a therapy which can reduce uric acid levels by utilizing Indonesian medicinal plants. Red meniran is in the same family with white meniran, which is proven effective in reducing uric acid levels, so similar efficacy is expected from red meniran. The study used six groups with each group consisted of 6 mice; they were control group, standard group, and four treatment groups. The mice were induced with hyperuricemia using potassium oxonate 250 mg/kg BW; after 30 minutes, control group was given a suspension of CMC Na 0.5%, standard group was given 10 mg/kg BW of allopurinol, and treatment groups were given ethanol extract of red meniran at doses of 25 mg/kg BW, 50 mg/kg BW, 75 mg/kg BW and 100 mg/kg BW. The effectiveness of red meniran ethanol extract was determined by measuring uric acid levels of mice in 60th, 90th, 120th, 150th, and 180th minute after treatment. The result indicated that red meniran could lower uric acid levels at an effective dose of 50 mg/kg BW. Uric acid levels reduction occurred in the 90th minute.

Key words: red meniran, Phyllanthus urinaria L., ethanol extract, uric acid levels, hyperuricemia, mice