ABSTRACT

PERMANA ADE.M, 2014. DIURETIC ACTIVITY OF SAMARINDA (Carissa carandas L.) FRUIT ETHANOL EXTRACT ON WISTAR STRAIN OF WHITE MALE RAT, THESIS, PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

One of plants with diuretic effect is samarinda (Carissa carandas L.) fruit. Diuretic activity deriving from plant is expected safer than the synthetic one. Diuretic is used to release much more water, particularly in edema, hypertension, diabetes insipidus, renal stone and hypercalcemia. The purpose of this study to know the diuretic activity and effetive dosage samarinda fruit ethanolic extract on male rats of Wistar.

Samarinda (Carissa carandas L.) fruit powder was extracted with meceration method using ethanol 70% as the solvent. The resulting extract was trialed with the tested animal to determine diuretic effect and compared with furosemid 1.44 mg/200g BW. This method employed 25 Wistar strain of white male rats as tested animal divided into 5 groups: CMC 0.5%, furocemide 1.44 mg/200g BW, ethanol extract of samarinda fruit at doses 50, 100 and 200 mg/200 g BW. The tested animal was put into the metabolic stall, measured for their cumulative urine volume and AUC (Are Under the Cruve). The data obtained was analyzed using one-way ANOVA at confidence interval of 95%, and the followed by LSD (Least Significant Difference) test.

The result of research found that the ethanol extract of samarinda fruit had diuretic activity. The most effective dose as diuretic effect was 200 mg/200g BW.

Keywords: samarinda fruit (Carissa carandas L.) ethanol extract, diuretic.