

**THE EFFECT OF MAHKOTA DEWA (*Phaleria macrocarpa*) FRUIT PULP EXTRACT FOR THE QUALITY OF WHITE RAT (*Rattus norvegicus*) SPERMATOZOA**

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**ABSTRACT**

This research was conducted to determine the effect of mahkota dewa fruit pulp extract for the quality of white rats spermatozoa including membran integrity, viability and motility. Flavonoid active compound consisted in mahkota dewa (*Phaleria macrocarpa*) fruit pulp is substance that serve as antioxidant. The experimental animals used are 24 male rats with 200-250 gram average body weight. The treatments were divided into 4 groups and each group got 6 repetitions. P0 as control was treated with CMCNa 0,5% without mahkota dewa (*Phaleria macrocarpa*) fruit pulp extract. The doses of the extract used 7,5 mg/200g BW (P1), 15 mg/200g BW (P2), 30 mg/200g BW (P3). Each treatment was given perorally with dose 1 ml/rat/day along 14 days. The experiment design used in this study was completely random design (CRD). The data were analyzed using ANOVA (Analysis of Variance) continued with honestly significant difference test ( $p < 0,05$ ). The result showed that there is significant effect from the therapy on the quality of rats spermatozoa especially to membran integrity, viability and motility. The treatment from P2 group showed the best result in maintaining the quality of rats spermatozoa.

**Keywords:** mahkota dewa, spermatozoa, membran integrity, viability, motility.