

**EFFECT OF GUAVA FRUIT (*Psidium Guajava L.*) EXTRACT TO THE
DIAMETER AND EPITHELIUM THICKNESS OF SEMINIFEROUS
TUBULES TESTES IN RATS (*Rattus norvegicus*)
EXPOSED TO CIGARETTE SMOKE**

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ABSTRAK

The purpose of this research is to prove the effect of guava fruit extract to the diameter and epithelium thickness of seminiferous tubules testes in rats exposed to cigarette smoke. This experimental research using 25 rats with an average weight of 150-200 gram. Group of negative control (K-) was given CMC Na 0.5% 2 ml/head without exposed by cigarettes smoke, group of P0 was exposed with cigarette smoke and given CMC Na 0.5% 2 ml/head, treatment groups P1, P2 and P3 treated with guava fruit extract at dose of 3.78 mg/200gBB, 7.56 mg/200gBB, 11.34 mg/200gBB and exposed to cigarette smoke. Exposure cigarette smoke had been given three pieces cigarettes per group each day. The result showed that guava fruit extract has potential improved diameter and epithelium thickness of seminiferous tubules testes exposed to cigarette smoke in the highest dose 11.34 mg/200gBB. Based on statistical data analysis using Analysis of Variance (ANOVA) it showed significant different ($p=0.000$), further analysis using Duncan Multiple Range Test (DMRT), it showed there were different in each group. The conclusion of this research showed that guava fruit extract could improve the diameter and epithelium thickness of seminiferous tubules testes in rats exposed to cigarettes smoke.

Keywords : guava fruit extract, seminiferous tubules, cigarettes smoke.