THE EFFECT OF MANGOSTEEN PEEL EXTRACT (Garcinia mangostana L.) TO THE NUMBER OF PLACENTAL TROPHOBLAST CELLS IN MICE (Mus musculus) EXPOSURE TO CIGARETTE SMOKE

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ABSTRACT

The purpose of this study was to find out the effect of mangosteen peel extract (garcinia mangostana L.) to the number of placental trophoblast cells in mice (mus musculus) exposure to cigarette smoke. Experimental animals were used 25 pregnant mice strain Balb / c, and then divided into five groups K-, K+, P1, P2, and P3. K- was only given distilled water during day 6 to day 17 of gestation, K+ was given exposure to cigarette smoke during day 6 to day 17 of gestation, P1, P2, and P3 were exposed to cigarette smoke and given mangosteen peel extract at a dose of 50 mg / kg body weight, 100 mg / kg body weight, 150 mg / kg body weight during gestation day 6 to day 17. The sample used in this study was 25 plasenta. Data were analyzed using ANOVA and Tukey test. The results showed significant differences in the number of placental trophoblast cells of mice between treatment groups. According to research results, a dose of 150 mg / kg BW has a large effect on the reduction in the number of placental trophoblast cell death and had the optimum dose to inhibit the placental trophoblast cell death.

Key words: Garcinia mangostana L., placental trophoblast cells, cigarette smoke.