ANTIFERTILITY EFFECT OF SUGAR APPLE SEED EXTRACT (*Annona squamosa*) WITH ETHANOL SOLUTION IN FEMALE WHITE MICE

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ABSTRACT

Background: Global search for antifertility medicine is going on to tackle population explosion problem. There are several medicinal plants that could be used as an antifertility treatment, one of which is Srikaya or sugar apple fruit (*Annona squamosa*). This study aimed to determine the antifertility effect of sugar apple seed extract with ethanol solution in female white mice.

Subjects and Method: A randomized control trial study was conducted on 12 mice, divided into 4 groups (T1, T2, T3, and control) with 3 replication. In the negative control group, 3 mice received aquadest treatment. T1, T2, and T3 groups obtained 0.03 mg/day, 0.07 mg/day, and 0.14 mg/day sugar apple seed extract, respectively. Each group was given 0.5 ml/day of sugar apple seed extract orally for 14 days. The dependent variable was infertility measured by the number of fetuses. Mean differences between groups were tested by ANOVA test.

Results: There was statistically difference in mean number of fetus, including control group (mean= 8.33), T1 group (mean= 6.33), T2 group (mean= 4.33), and T3 group (mean= 1.00), and it was statistically significant ($p < 0.05$). The higher doses of sugar apple seed extract given to the mice, the lower number of fetus produced by the mice.

Conclusion: Sugar apple seed extract (*Annona squamosa*) lowers the number of the fetuses in female white mice.

Keywords: antifertility, sugar apple seed extract, ethanol solvent, number of fetuses

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