

**EFFECT OF HONEY IN SPERMATOGENESIS STAGING AND
LEYDIG CELLS ON MICE (*Mus musculus*) INFECTED BY
*Toxoplasma gondii***

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ABSTRACT

The aim of this research is to know about the staging of spermatogenesis and leydig cells in mice that injected by *Toxoplasma gondii* after giving honey as a preventive substance. This research used 25 mice in age 2-4 month with 20-30 weight. Mice were divided into 5 groups (P0, P1, P2, P3 dan P4). P0 as a control treatment were given aquades in peroral, P1 was a group given honey in doses I (0.08ml/0.2ml/day) during 14 days in peroral, P2 was a group that given infection by *T.gondii* in doses 10^3 in peritonal, P3 was given honey in doses I (0.08ml/0.2ml/day) then injected by *T.gondii*, and P4 was given honey in doses II (0.12ml/0.2ml/day) then injected by *T.gondii*. This research conducted in 18 days, in day 14th mice were given honey and the day 15th–18th mice injected by *T.gondii* doses 10^3 . The data result was analyzed with *Analysis of Variant* (Anova) and continued with Duncan (5%). Comparison statistical showed with *SPSS statistic 20 for Windows*. The result of analysis, P0 and P1 were significantly different ($p < 0.05$), with the increase number of spermatogenic and leydig cells. P0 and P2 also significantly different, with the decrease number of spermatogenic and leydig cells. In P2 and P3 group were not significantly different ($P > 0.05$), also in P4 group were not significantly different with P0 and P1. The results of this research showed that honey in doses II can maintain the number of spermatogenic and leydig cells as a preventive substance against *T.gondii*.

Key words : Honey, *Toxoplasma gondii*, testes.