

ABSTRACT

Royal jelly is assumed to be able to increase female mice fertility because it consist of gonadotrophin hormones. Gonadotrophin hormones activities from Royal jelly influences GnRH and then it will influence secretion hormones FSH and LH that causes the occurrence of formation process, the maturation of follicle and ovulation, and the formation of corpus luteum.

The purpose of this study is to find out how far the influence of royal jelly administration towards female mouse fertility based on the amount of follicle and the growth of mouse embryo.

This study used 48 puberty female mice as trial animals and 24 fertile male mice. Royal jelly is administered for 5, 10, and 15 days, without administration of royal jelly as a control. This study used Complete Random Arrangement. Data were analyzed by using Variant Analysis and continued with LSD-test with real level of 5%.

The results of this study show that the treatment at the administration of Royal jelly level gives very real influences ($P < 0,05$) on the growth of mice follicle and embryo with greater average on treatment groups than control. In the other hand, primary follicle does not likely show its influences ($P > 0,05$) on the administration of royal jelly level for 10 and 15 days.

Key word: Fertility, Royal jelly and Follicle ovary