

ROYAL JELLY SUPPLEMENTATION EFFECT ON INFERTILIZATION CASE : Experimental Research Using Mice (*Mus musculus*) As Model

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ABSTRACT

Purpose of this research was to search the royal jelly supplementation effect on ovum of infertile mice (*Mus musculus*) to *in vitro* fertilization ability. This research is a laboratory experimental research which experimental animal that used as a infertility models are 24 female mice separated in 4 group consist of 1 control group and 3 treatment group that have an experimental animals for each group. The female mice injected by subcutaneous way of 0,025 ml testosterone propionate for 14 days. Infertile indication could be known by vagina's smear, that indicated by diestrus fase on the mice. After this treatment, one of this group feed by aquadest as a control group and the others group feed by royal jelly which P1 group has 1,75mg/20gBW/day dose, P2 group has 3,5mg/20gBW/day dose and P3 group has 5,25mg/20gBW/day dose that feed per oral for 14 days. The royal jelly effect on ovum's fertility ability observed by *In Vitro* Fertilization (IVF) after 24 hours incubation. Indication of fertilization signed by the ovum growth being sigot. The result of this research are on control group (P0) and P1 group have no zigot, on P2 group has 12 zigot and P3 group has 27 zigot. This research has a conclusion that royal jelly have effect on fertility ability in *in vitro* fertilization.

Key words : Royal Jelly, *In Vitro* Fertilization, Infertility, ovums