UNIVERSITI TEKNOLOGI MARA

# EFFECT OF GINGER (Zingiber officinale) EXTRACT ON HISTOLOGY OF FEMALE REPRODUCTIVE ORGANS FOLLOWING SERIES OF INCUBATION TIME

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#### ABSTRACT

Ginger ( Zingiber officinale ) is one of the spices that is commonly used as a medicine from two thousand years ago in several Asian countries. Numerous studies showed that it has various beneficial effects. However, the study of ginger on female reproductive organs is still sparse. Therefore, we conducted a preliminary study on the ginger effect to histology of female reproductive organs in mice which include ovary and uterus. 100µg/kg of ginger extract was administered orally to three groups of female mice. A fourth group served as control and received the treatment vehicle, distilled water. The treatment lasted for 7, 14 and 21 days before sacrificed. The ovary and uterus were collected from executed mice for histological examination. The results demonstrated that 100µg/kg of ginger extract do not exert any effect as there were no changes found in the histological structure of ovary and uterus. All of the female mice exhibit normal appearance and arrangement of ovary and uterus cells without any sign of toxicity. In conclusion, 100µg/kg of ginger extract was considered to be safe for consumption for 7, 14 and 21 days. This study may encourage future study to be done for further examination on the safety and the potential risks of toxicity of ginger.

Keywords :

Ginger, Histology, Safe, Ovary, Uterus