UNIVERSITI TEKNOLOGI MARA

# HISTOLOGICAL ANALYSIS ON UTERUS AND OVARY CELLS OF FEMALE MICE TO DOSE RESPONSE OF GINGER EXTRACT (Zingiber officinale)

# LAILATUL MUNIRAH BT ISMAIL

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### ABSTRACT

Ginger extract is mainly used as a substance in daily cooking especially among Asian and also as one important ingredient in traditional medicine. Given an increase in products based on ginger as an ingredient, it is reasonable to assume that exposure of ginger to human has increased. Increasing uses of ginger in human daily life caused concern on the effect of this substance to human especially to the female reproductive system. In this study, female mice is treated with ginger extract for 14 days. There are 20 rats used in this experiment, and divided into 5 groups which is I, II, III, IV and V. Each of this consists of 4 rats. Group I were used as control in this experiments. While the mice in group II to V were treated with different dose of ginger extract which is  $50\mu g/kg$ ,  $100\mu g/kg$ ,  $200\mu g/kg$  and  $300\mu g/kg$ . The observations and analysis made in this study was using histological analysis examined by light microscopy. Results indicated that there is no abnormality or any significant changes to the uterus cells up to dose 300µg/kg/day. For ovary cells treated with dose 50µg/kg/day and 100µg/kg/day shows normal cells but in mice treated with dose 200µg/kg/day and 300µg/kg/day there is some changes in ovary cells.