

**THE ENHANCEMENT OF EPITHEL THICKNESS ON FULL THICKNESS WOUND OF MARMOT (*CAVIA COBAYA*) DUE TO ORAL ADMINISTRATION OF WATERMELON (*CITRULLUS LANATUS*) SEEDS EXTRACT**

**ABSTRACT**

**Background :** Tissue damage triggers complex activity which is called as wound healing process. It needs amino acid nutrients such as glutamic acid and arginine to support the process. **Purpose :** This study is aimed to determine the effects of oral administration of watermelon (*Citrullus lanatus*) seeds extract which contains glutamic acid and arginine in epithelization of *Cavia cobaya*'s full thickness wound. **Methods :** A 10 mm full thickness wound was made on the back skin of every subject which is classified into group K<sub>1</sub> and K<sub>2</sub> as control groups and P<sub>1</sub> and P<sub>2</sub> as treatment groups. Group P<sub>1</sub> got 1 gram/day oral administration of watermelon (*Citrullus lanatus*) seeds extract for 7 days in and P<sub>2</sub> for 14 days. Control groups did not get watermelon (*Citrullus lanatus*) seeds extract. **Results :** The treatment groups showed thicker epithelization than control groups. **Conclusion :** There was difference of epithelization thickness between control and treatment groups after oral administration of watermelon (*Citrullus lanatus*) seeds extract.

**Keywords :** wound healing, glutamic acid, arginine, watermelon seeds extract.