

**PEMBERIAN EKSTRAK TERIPANG EMAS (*Stichopus hermanii*) TERHADAP
JUMLAH MAKROFAG PADA PROSES PENYEMBUHAN ULKUS
TRAUMATIKUS *Rattus norvegicus* STRAIN WISTAR**

**THE GIVING OF GOLD SEA CUCUMBER EXTRACT (*Stichopus hermanii*) TO
THE NUMBER OF MACROPHAGES FOR TRAUMATIC ULCER HEALING
PROCESS *Rattus norvegicus* STRAINS WISTAR**

ABSTRACT

Background. Traumatic ulcer is a lesion formed by local tissue damage that caused by trauma epithelium. In the process of wound healing, macrophages play a role especially in the inflammatory and proliferative phases. The golden sea cucumber (*Stichopus hermanii*) has been useful for food and medicine. The golden sea cucumber contains a lot of protein collagen, Glycosaminoglicans (GAGs), glycine, glutamic acid, arginine and amino acids. GAGs play a role in the process of wound healing. **Purpose.** Proving that gold sea cucumber extract (*Stichopus hermanii*) can be increase the number of macrophages in the healing process of traumatic ulcer rats wistar. **Method.** *Rattus norvegicus* strains wistar (200-300 grams, 8 weeks). The lower lip mucosa rats wistar touched by burnisher number 4 and heated for one minute and then touched for one second. Ulcers are formed on day 2, and on day 3 the treatment group was given a gold sea cucumber extract 20%, 40% and 80% concentrations. The number of machropages calculated by histometric technique from preparation that painted by hematoxilin-eosin staining and calculated on microscope at 200 times to 1000 time. All data will be analyzed using ANNOVA. **Result.** The research showed that there were different result computed using annova. Annova shows the significant different ($p < 0,05$) in 40% and 80% concentrations to the control group, while the 20% concentration to the the control group was not different. **Conclusions.** The giving of gold sea cucumber extract can be increase the number of machropages for traumatic ulcer healing process *Rattus norvegicus* strains wistar in 40% and 80% concentrations group.

Key words : *Stichopus hermanii*, macrophage, traumatic ulcer.