ABSTRACT

Dilaga, Ramadhani Kurnia. 2017. **Study on the Growth of the *Chrysomya megacephala* Fly larvae on the Wistar Rats Cyanide induced Rats**. *Final Assignment, Faculty of Medicine, University of Brawijaya, Malang*. Supervisors : (1) Prof. Dr. dr. Loeki Enggar Fitri, M.Kes. Sp.Par.K (2) Dr. dr. Nadia Artha Dewi, Sp.M (K)

Cyanide (CN) is a very lethal toxic substance. CN groups can be found in many compounds, some are gas, solid or liquid. The identification of victims with Cyanide poisoning are difficult to handle, thus it have become a problem in the field of forensic. This study used the carcass of Wistar rats whose deaths were caused by Cyanide induction as a fly growing medium, analogous to the human body that died from Cyanide poisoning. This study was a laboratory experimental study by comparing the differences in larvae growth of the *Chrysomya megacephala* fly by using Cyanide induced rat carcass growing media and rat carcasses by cervical dislocation (normal). After both rats die differently, they were left for 24 hours, and given 50 flies per rat, then the growth from eggs to adult flies were observed every morning and evening. 10 largest larvae in each stages were taken to observe the growth of larvae including length, weight and duration of growth. The data obtained were included in the table to analyze the significance using Independent Sample T-test and Mann Whitney Test. All statistical analysis used IBM SPSS Statistics 13.0 program from Windows with a significance level of 0.05 ($p = 0.05$) and 95% confidence level ($\alpha = 0.05$). The results showed the growth of the length and weight of fly larvae from the Cyanide induction medium are smaller than the normal media. Based on results, a conclusion can be made that the larvae with Cyanide have a longer growth duration compared to the larvae without the cyanide, and there is differences of length and weight of larvae between Cyanide media with normal media.

Keywords : Larva Flies *Chrysomya megacephala*, Cyanide Induction, Cervical Dislocation, Independent Sample T-test