ABSTRACT

EFFECTIVENESS OF SOURSOP LEAF EXTRACT (*Annona muricata* L) ON EGG HATCHABILITY OF *Aedes aegypti*

by

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*Dengue* Haemorrhagic Fever (DHF) is one of the health problems in Indonesia that the number of sufferers is likely to increase and spread more widely. Outbreaks of dengue fever are found in South of Lampung, although the prevention efforts of vector of dengue fever have been carried out. The most effective vector control is to break the cycle of life in places brood. The use of insecticides that are safe for the environment is to use plants as a natural insecticide. One of the plants that can be used as a natural insecticide are leaves of the soursop (*Annona muricata* L) containing active compounds flavonoids, alkaloids, saponins, and essential oils that are *entomotoxicity* that can inhibit egg hatchability.

The purpose of this study was to determine the effectiveness of soursop leaf extracts against the hatchability egg of *Aedes aegypti*. This is an experimental research design using completely randomized design with 6 treatment group, 0% (negative control), 0.1%, 0.3%, 0.5%, 0.7% and 1% to 25 eggs in each group and 4 repetitions. Observations dilakukan every 24 hours for three days, then test analysis.

Results hypothesis Kruskal-Wallis test showed that all the effective concentration compared to the control (0%). The optimum concentration of soursop leaf extract that effectively inhibit hatching eggs of *Aedes aegypti* was 1% with *Effective Doses* 85% (ED$_{85}$).

**Keywords:** *Aedes aegypti*, soursop leaf, Ovicides.