

ABSTRACT

THE EFFECTS OF CHLOROFORM FRACTION KECOMBRANG STEM (*Etlingera Elatior*) AS LARVICIDES TOWARDS *EDES AEGYPTI* INSTAR III LARVA

By

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A DHF incidence number increases each year in Bandar Lampung. Dengue is a dangerous disease caused by dengue virus through *Aedes Aegypti* Mosquito bite. Using Prevention of dengue vector control and chemical environment in long-term is dangerous. Therefore, an environmental friendly natural insecticide is used which is one of the kecombrang plants (*Etlingera elatior*) contain active compound in saponins form and flavonoids are larvacides.

This research aims to determine the effectiveness LC_{50} and LT_{50} chloroform fraction kecombrang stem (*Etlingera elatior*). This study was an experimental using randomized control trial method, divided into 6 concentrations chloroform fraction kecombrang stem (*Etlingera elatior*), which consists of a negative control (0%), 0.25%, 0.5%, 0.75%, 1% concentrations and positive control (Abate 1%). This study used a sample of 480 larvae, divided into 20 larvae each group in 200 ml solution with various concentrations, and four repetitions. The data is analyze

used by *one-way ANOVA* ($p < 0.05$), *Post-hoc Bonferroni* ($p < 0.05$), probit test to calculate LC_{50} and LT_{50} .

The average number result of death larvae are 36.25% at 0.25% concentration, 57.7% at 0.5% concentration, 77.5% at 0.75% concentration and 90% at 1% concentration. Based on these result the most effective concentration is at 1% concentration. LC_{50} value was 1.39% at 20 minute; 1.196% at 40 minute; 0.896% at 60 minute; 0.637% at 120 minute; 0.517% at 240 minute; 0.479% at 1440 minute; 0.422% at 2880 minute, and 0.369% at 4320 minute. LT_{50} value was 544.80 minute at 0.75% concentration and 51.85 minute at 1% concentration.

Key word : *Aedes aegypti*, Kecombrang (*Etilingera elatior*) and Larvacides