



## Effectiveness of Seed Extract Hutun (*Barringtonia asiatica* KURZ), on LARVA *Aedes aegypti* Vector Disease Dengue Fever

Alfrits Komansilan<sup>1\*</sup>, Ni Wayan Suriani<sup>2</sup>

<sup>1</sup>Department of Physics, Faculty of Mathematics and Natural Sciences, Manado State of University, North Sulawesi, Indonesia

<sup>2</sup>Department of Chemistry, Faculty of Mathematics and Natural Sciences, Manado State of University, North Sulawesi, Indonesia

**Abstract:** The effectiveness of vegetable insecticide extracts of hutun (*Barringtonia asiatica* Kurz) seeds on larvae of dengue hemorrhagic fever (DHF) vector *Aedes aegypti* mosquito has been conducted. The test results indicate that there are differences in the real (significant) mortality level of mosquito larvae at various levels of concentration.

The test result of Probit Analysis shows the  $LC_{50}$  mortality concentration value of *Ae. aegypti* larvae with the provision of concentration of 35.572 ppm is a concentration quantity value of the methanol extract of the hutun seeds which is the most effective way to kill the larvae of *Ae. aegypti* as much as 50% during 24 hours of treatment. According to the toxicity criteria, based on *Australian Petroleum Energy Association*, the concentration of 35.572 ppm of seeds hutun methanol extract or ( $LC_{50} = 35.572$  ppm) at 24 hours of observation is included in the criteria for Toxic Toxicity.

**Keywords:** Extraction, vegetable insecticides, Hutun seeds, *Aedes aegypti*.

Alfrits Komansilan *et al* /International Journal of ChemTech Research, 2016,9(4),pp 617-624.

\*\*\*\*\*