

**EFFECT OF MIXED VARIATIONS OF LIME (CITRUS
AURANTIFOLIA) AND PATCHOULI (POGOSTEMON CABLIN) SKIN
EXTRACTS TO CULEX SP LARVAE DEATH**

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ABSTRACT

Culex sp is a disease of filariasis or elephantiasis. Culex sp control uses chemicals that will continuously cause environmental pollution impacts and the use of insecticides that are not environmentally friendly can cause resistance. This study aims to determine whether there is an effect of variations in the concentration of the mixture of Lime Peel (*Citrus aurantifolia*) and Patchouli Leaf (*Pogostemon cablin*) extracts on the mortality of Culex sp. Larvae.

This research is an experimental study with a Quasi Experimental design by providing variations in the concentration of a mixture of lime peel extract (*Citrus aurantifolia*) and patchouli leaf (*Pogostemon cablin*) 0%, 10%, 15%, 20% on media where each container contains 25 Culex larvae. sp for 24 hours.

The results of this study showed that the number of larvae that died at a concentration of 0% was 0%, a concentration of 5% was 16%, a concentration of 10% was 26%, a concentration of 15% was 45%, a concentration of 20% was 81% of the 25 larvae tested on each concentration and replicated 5 times. The results of the One Way Anova statistical test showed that there were differences in the concentration variations of the mixture of lime peel extract and patchouli leaves on the number of dead Culex sp larvae with the calculated F value of 66,322 with a significant value of 0.000. So the conclusion is that the higher the concentration, the higher the mortality of Culex sp larvae. Suggestions for this research need to be continued by using other types of larvae, such as *Aedes aegypti*, *Aedes albopictus*, *Mansonia*, and *Anopheles* sp.

Reading List : 33 Journals and Books (2007-2021)

Keywords : Culex sp, Lime peel, Patchouli leaf, Larvae Death.