THE EFFECTIVENESS OF ETHANOL *Tithonia diversifolia* LEAF'S LARVACIDE EXTRACT ON *Musca domestica* FLIES

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ABSTRACT

The research was done to investigate the larvacide activity of *Tithonia diversifolia* leaf on *Musca domestica* flies. It used experimental 480 third instar larvae of *Musca domestica*. They were divided into 6 treatments and 4 replicates in which each of them were put into aquades liquid as K(-), 0.05% asuntol solution as K(+), *Tithonia diversifolia* leaf ethanol extract with concentration of 1.25% (P1), 2.5% (P2), 5% (P3) and 10% (P4). The parameters measured is based on number of larval mortality that was observed after 24 hours of treatment. The research method was completely randomized design and the data was analyzed by Anova then continued with Duncan's multiple range test. To know LC\(_{50}\) and LC\(_{90}\) were using probit analysis. The results indicated that K(-) was significant difference with P1, P2, P3 and P4, but K(+) was not significant with P4 (P>0.05). LC\(_{50}\) and LC\(_{90}\) were known 2,241% and 5,881%. According this research, the *Tithonia diversifolia* leaf ethanol extract showed the best effect in a concentration of 10%.

Key words: *Tithonia diversifolia*, *Musca domestica*, Larvacide