

**ESSENTIAL OILS OF NEEM SEEDS (*Azadirachta indica*) AND
WORMWOOD LEAVES (*Artemisia vulgaris*) EFFECT ON THE
ACTIVITIES OF *Diaphorina citri***

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ABSTRACT

This study aims to determine the effect of applying a combination of *Azadirachta indica* essential oils and *Artemisia vulgaris* essential oils on the discovery behavior of *D. citri* hosts and the optimal concentration for the repellent effect. The research method used a Completely Randomized Design (CRD) with a one-factor combination of *A. indica* essential oils with concentration 1%, 3%, and 5% and *A. vulgaris* essential oils with concentration 0.5%, 1%, and 2%. The data obtained was analyzed for variance using Analysis of Variance (ANOVA) with a significance level of 5%, followed by testing using the Duncan Multiple Range Test (DMRT) with a significance level of 5%. The test was carried out using non-choice test, choice test, persistence test, and treatment effect test. The research result show that combination of *A. indica* and *A. vulgaris* had a repellent effect on *D. citri*. Index of Repellency show the lowest value (highest repellency) is *A. indica* 5% + *A. vulgaris* 2%. The persistence test, from day 1 to day 28, the repellent ability decreased due to evaporation. The treatment effect test, *A. indica* and *A. vulgaris* also had an inhibition effect for citrus plant.

Keyword: *Diaphorina citri*, Repellency, *Azadirachta indica*, *Artemisia vulgaris*