EFFECT OF COMBINATION OF GUAVA LEAVES EXTRACT WITH KAOLIN OR HORTICULTURAL MINERAL OIL (HMO) TO REPEL *Diaphorina citri*

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ABSTRACT

Citrus is one of fruit that is favored by the world community, including Indonesia. Citrus Vein Phloem Degeneration (CVPD) is a disease that causes citrus productivity to decrease. Diseases caused by *Candidatus Liberibacter asiaticus* can be transmitted by CVPD infected seeds or through its insect carrier (vector), *Diaphorina citri*. This study aimed to determine effect combination of guava leaves extract with kaolin or horticultural mineral oil (HMO) to repel *D. citri* and the optimal concentration that has repellent effect. The research was carried out from November 2023 to February 2024. The research method was used choice test method, and non-choice test method with three repetitions. It was arranged in a completely randomized design. The combination of guava leaves extract with a concentration of 0.5%, 1% and 2% with kaolin 0.5 % and HMO 0.5%. Parameters observed were the number of *D. citri* that moved and did not move, which survived in the treatment container, and died, the percentage of repellency, the repellency index, the number of citrus leaves, the length of the citrus leaves, and the length of citrus twigs.The data obtained was analyzed by analysis of variance (Anova with a level of 5%), followed by DMRT at a level of 5%. The concentration mixture of 2% guava leaves extract with 0.5% kaolin had a repellency index against *D. citri* of 0.74 after being tested for 12 hours using a non-choice test.

Keywords: *Diaphorina citri,* HMO, kaolin, guava leaves extract.