

FEEDING AND OVIPOSITION BEHAVIOR RESPONSES OF *Diaphorina citri* ON CITRUS PLANTS APPLIED WITH KAOLIN PARTICLE FILM

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ABSTRACT

Oranges are very popular fruit in Indonesia and are widely consumed and used as raw materials in the food industry. However, in 2023 orange production decreased compared to 2021 due to an infestation of the pest *Diaphorina citri*, which causes Citrus Vein Phloem Degeneration (CVPD). The objective of this study was to determine the impact of kaolin use on host detection and oviposition by *Diaphorina citri* and to identify the optimal concentration as a repellent for host detection and oviposition by *Diaphorina citri*. This study used a Completely Randomized Design (CRD) with kaolin treatments including a control, 3% kaolin, and 5% kaolin. The research method was conducted by a non-choice method test with six replications for host-finding behavior and oviposition. The observed parameters included the number of *Diaphorina citri* perched on the plant, perched on the cage, the number of eggs, and the number of nymphs. The collected data were analyzed using analysis of variance (ANOVA) at a significance level of 5%, followed by Duncan's Multiple Range Test (DMRT) at a significance level of 5%. The result showed that 3% and 5% kaolin can inhibit the *Diaphorina citri* in feeding behavior and oviposition. Kaolin can interfere *Diaphorina citri*'s ability to find its host and oviposition. Although concentrations of 3% and 5% kaolin can inhibit *Diaphorina citri* in finding hosts and oviposition, neither is more optimal in inhibiting *Diaphorina citri* perched on citrus plants.

Keyword: CVPD, *Diaphorina citri*, kaolin, host, oviposition.