

**Host Finding Disruption of *Diaphorina citri* by Mugwort (*Artemisia vulgaris*)
Essential Oil and Kaolin**

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ABSTRACT

Citrus Vein Phloem Degeneration (CVPD) is critical diseases in citrus crops that caused by *Candidatus Liberibacter asiaticus* bacteria, which transmitted through *Diaphorina citri*. This study aims to examine the effect of *Artemisia vulgaris* and Kaolin to *Diaphorina citri*. The research was carried out in the experimental garden, Faculty of Agriculture, UPN "Veteran" Yogyakarta, Sleman Regency, Special Region of Yogyakarta, from March 2023 up to August 2023. This research was arranged in completely randomized design. First method was non-choice test with 9 treatments of *A. vulgaris* are 0.5%, 1%, and 2%, Kaolin 1.5%, 3%, and 5% and combination of *A. vulgaris* 0.5% + Kaolin 5%, *A. vulgaris* 1% + Kaolin 5%, *A. vulgaris* 2% + Kaolin 5%. Choice test, persistence test and test for effect the treatment to the growth of the citrus plants was used the best result from non-choice test. The results were analyzed using analysis of variance with significant level of 5%. If there are real differences, analysis was continued using the Duncan Multiple Range Test with significance level of 5%. The application of *A. vulgaris* concentration of 1% was have the best potential to against *D. citri* and did not have effect to the growth to citrus plants. The persistence test showed that the repellency effect of *A. vulgaris* 1% decreased over time. The reduced repellency was because of bio-pesticides, which are easier to evaporate, and the application better be repeated.

Keywords: *Artemisia vulgaris*, CVPD, *Diaphorina citri*, Kaolin