REPELLENT ACTIVITIES OF KAOLIN AND THE ESSENTIAL OIL FROM Artemisia vulgaris AGAINST Diaphorina citri

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ABSTRACT

Citrus Vein Phloem Degeneration (CVPD) is a destructive citrus disease caused by Candidatus Liberibacter asiaticus. of the α-proteobacteria. CVPD are transferred by their vectors directly into living phloem cells. It is spread by the psyllids vectors Diaphorina citri. This study aims to examine the effect of various concentration of mixed combinations kaolin and Artemisia vulgaris essential oil on finding host behavior D. citri. The research was carried out in the plant protection laboratory and experimental garden, Faculty of Agriculture, UPN "Veteran" Yogyakarta, located in Ngropoh, Condongcatur, Kec. Depok, Sleman Regency, Special Region of Yogyakarta. The research was carried out from February 2023 to July 2023. The research method was used choice test method, and non-choice test method. The research method arranged in a completely randomized design. The treatment tested was a concentration mixture of Artemisia vulgaris essential oil and kaolin. The concentration mixture of 2% A. vulgaris essential oil and 1.5% kaolin had a repellency index against D. citri of 0.66 after being tested for 12 hours using a nonchoice test. The repellency of the concentration mixture is based on the odor emitted, based on the choice test, 90% of D. citri were rejected.

Keywords: D. citri, repellency, Artemisia vulgaris EO, kaolin