EFFECTIVENESS TEST OF VEGETABLE INSECTICIDES LIQUID SMOKE OF PALM OIL EMPTY FRUIT ON MORTALITY OF FEATURES (Bemisia tabaci Genn.) IN ROBUSTACOFFEE PLANT (Coffea canephora)

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ABSTRACT

Whitefly pest (Bemisia tabaci) is one type of pest that causes a decrease in the production of robusta coffee plants. There are several ways to control whitefly pests, one of which is by using liquid smoke vegetable insecticides of empty palm oil fruit bunches (EFB). This research was conducted in December 2022 at the Jember State Polytechnic Plant Protection Laboratory. The purpose of this study was to determine the effectiveness of vegetable insecticides liquid smoke of empty palm fruit bunches on the mortality of whitefly pests on robusta coffee plants. This study used a Completely Randomized Design (CRD) Non-Factorial consisting of 5 treatments with 4 replications namely control, 1% OPEFB liquid smoke, 2% OPEFB liquid smoke, 3% OPEFB liquid smoke, and 4% OPEFB liquid smoke. The research data were analyzed using ANOVA, if the results showed a significant effect then the BNT level 5% advanced test was continued, while probit analysis was used to determine LT50. Parameters used were mortality, LT50, and physical changes. The results showed that liquid smoke vegetable insecticide EFB had a very significant effect on the mortality of whitefly pests on robusta coffee plants with the fastest 24-hour LT50 value at 4% liquid smoke concentration of empty palm oil bunches,

Keywords: whitefly pest, OPEFB liquid smoke, mortality