

**TOXICITY TEST OF LIQUID SMOKE OF EMPTY OIL PALM
BUNCHES ON THE GROWTH OF *Fusarium oxysporum*
fungus CAUSES OF TOBACCO WILT DISEASE**

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ABSTRACT

Fusarium oxysporum fungus is a soil fungus that can survive for a long time in the soil as chlamydospores found in many roots of diseased tobacco plants. There are several ways to control the fungus, one of which is with TKKS vegetable pesticides. Toxicity test that gives toxic or toxic effects at a certain period of time. This research will be carried out in August-September 2023 at the Plant Protection Laboratory of the Department of Agriculture, Jember State Polytechnic. The purpose of the study was to determine the toxicity of vegetable pesticides of empty oil palm bunches on the growth of fungi that cause tobacco wilt disease (*Fusarium oxysporum*). The method used is a Non-Factorial Complete Random Design (RAL), which consists of 5 kinds of treatments, including: P0: As a control to calculate HR (Relative Resistance) without EFB, P1: Concentration of vegetable pesticides TKKS 1%, P2: Concentration of vegetable pesticides TKKS 2%, P3: TKKS vegetable pesticide concentration 3% and P4: TKKS vegetable pesticide concentration 4%. The parameters used are measuring the diameter of the *F. oxysporum* fungus colony, calculating the percentage of inhibition, observing morphological of *F. oxysporum*. The results showed that vegetable pesticides of empty oil palm bunches (TKKS) had no real effect on inhibition and had a very real effect on the diameter of *Fusarium oxysporum* fungus colonies.

Key words : *Fusarium oxysporum*, TKKS Vegetable Pesticides, Toxicity Test