

ABSTRACT

THE EFFECT OF TEAK WOOD SAWDUST LIQUID SMOKE ON THE PATHOGEN CAUSING ANTHRACNOSE (*COLLETOTRICHUM MUSAE*) IN AMBON BANANA FRUIT (*MUSA PARADISIACA* VAR. *SAPIENTUM* LINN).

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Anthracnose disease caused by the fungus *Colletotrichum musae* is one of the post-harvest diseases that affects banana fruits. Liquid smoke from teak wood sawdust contains phenol and acid content that can be used as an alternative fungicide in managing anthracnose disease. This study aimed to determine the most effective concentration of teak wood sawdust liquid smoke in inhibiting the growth of *Colletotrichum musae* fungus. The experiment used a Completely Randomized Design in *in vitro* testing with 5 treatments and 5 replications, while in *in vivo* testing, an Unpaired t-test with 2 treatments and 20 replications was employed. The results showed that the application of teak wood sawdust liquid smoke can inhibit the growth of *Colletotrichum musae* on banana fruits. The application of a coating teak wood sawdust liquid smoke with a 50% concentration on Ambon banana fruit can reduce the frequency and intensity of attacks by the fungus *Colletotrichum musae*. Additionally, it can also decrease the rate of weight loss in Ambon banana fruit.

Keyword: Antraknose, liquid smoke, *Colletotrichum musae*, banana, teak wood sawdust