

**SCREENING POTENTIAL ANTAGONIST FUNGI AGAINST BLACK ROT  
DISEASE ON PINEAPPLE**

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## ABSTRACT

### SCREENING POTENTIAL ANTAGONIST FUNGI AGAINST BLACK ROT DISEASE OF PINEAPPLE

In Malaysia, pineapple had become one of the commercial fruits with the overall total export is RM 75.62 million. Pineapple production are mostly effected with the infection of the fungal diseases and among all of the disease, black rot was the one that caused serious economic problem to pineapple industry in Malaysia. Black rot disease of pineapple in Malaysia is commonly associated with attack from fungus *Chalara paradoxa*. Some local farmers were too dependent on the chemical fungicide to control the disease. In facts, controlling the disease by using chemicals can be expensive and sometimes ineffective. The uses of antagonistic fungi to control black rot disease on pineapple was one of the environmentally friendly controls which can reduce and avoid negative impact on human and beneficial microbes. Thus, the objectives of this studies is to isolate black rot pathogen from the diseased pineapple and beneficial fungi from healthy pineapple fruits and to screen the potential antagonistic fungi against the pathogen *in vitro*. Dual culture technique was used in achieving these objectives. Next, from the entire antagonist fungi that been tested, there was a unknown species which was coded as AF1 that can control the growth and development of the black rot disease pathogen. It shows some positive results which the colony of *C. paradoxa* were much smaller than the negative control with 71% of inhibition. Thus, it can be concluded that there was an antagonist fungal that can control black rot disease on pineapple.

Keywords: *Chalara paradoxa*, antagonist fungi, fungicide, dual culture technique, pineapple.