EVALUATION ANTIBACTERIAL ACTIVITY OF *Burkholderia cepacia* TG17 ISOLATE ON RICE BLAST DISEASE

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Summary

The research was conducted in the laboratory and net-house of Plant Protection Department, Cantho University. The objective of this research was to screen *B. cepacia* TG17 isolate able to manage rice blast disease caused by *Pyricularia oryzae*. The antagonistic ability against rice blast fungus of *B. cepacia* TG17 isolate was determined with 5 replications. The results shown that *B. cepacia* TG17 isolate could reduce mycelia growth of rice blast fungus with radiuses of inhibition zones reaches 6.25 mm and antagonistic efficacy 70.83% at 14 days after testing. In net-house condition, the ability biocontrol of *B. cepacia* TG17 isolate was tested with 5 replications. The results found that *B. cepacia* TG17 isolate was able to control rice blast disease. The treatment *B. cepacia* TG17 applied before and also after 2 days inoculation showed high ability to control the disease through two criteria: low disease index (5.26%) and high efficiency reduces disease (76.70%). On the other hand, *B. cepacia* TG17 treatment has higher the hight plant, the average of effectiveness tillers compared with control treatments.

**Keywords:** *Burkholderia cepacia* TG17, rice blast diseses, *Pyricularia oryzae*, plant grow promotion.