

**KHẢO SÁT KHẢ NĂNG ĐỐI KHÁNG CỦA XẠ KHUẨN
ĐỐI VỚI VI KHUẨN *Ralstonia solanacearum* GÂY BỆNH HÉO XANH
KHOAI LANG (*Ipomoea batatas*)**

Evaluation Antibacterial Activity of Actinomyces Isolates on
Ralstonia solanacearum Causing Bacterial Wilt Disease on Sweet Potato (*Ipomoea batatas*)

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Abstract

The research was conducted in the laboratory of the Department of Plant Protection, Can Tho University to screen actinomycetes able to control bacterial wilt disease on Sweet Potato (*Ipomoea batatas*) caused by *Ralstonia solanacearum*. One hundred and ninety eight (198) actinomycetes isolates were collected from Sweet Potato fields in some provinces of Mekong Delta, that were determined antagonistic ability against *R. solanacearum*. The results showed that 21 of 198 isolates in total were ability against *R. solanacearum*. Determination antagonistic ability of 21 actinomycetes isolates in controlling *R. solanacearum* with five replications, the results found that 3 isolates TTr44, TT9 and TT11 have high antagonistic ability with radius of inhibition zones reaches 4.51mm; 3.37mm and 3.25mm respectively, at 5 days after inoculation. On the other hand, lipase activity assay was tested on Tween 80 agar medium. The results found that 3 isolates TTr44, TT9 and TT11 have expressed the lipolytic activity, with the lipid lyses halo radius of 12.60mm; 13.80mm and 13.40mm, respectively at 9 days after testing. Proteinase activity assay was also tested on Skim milk agar medium. The results found that all testing isolates could produce proteinase and the TTr44 isolate has expressed the highest proteinolytic activity.

Keywords: Actinomyces, Bacterial wilt disease, lipid, protein, *Ralstonia solanacearum*