

**ASSESSMENT OF THE EFFECTIVENESS OF SOME
ANTIBIOTIC AND CHEMICAL COMPOUNDS FOR
CONTROLLING BACTERIAL WILT CAUSED BY
Ralstonia solanacearum ON *Chrysanthemum* sp.**

**Huynh Ngoc Tam, Le Uyen Thanh, Tran Thanh Tung,
Luu Thai Danh, Nguyen Thi Thu Nga**

Summary

The effectiveness of fourteen antibiotic and chemical compounds in controlling bacterial wilt caused by *Ralstonia solanacearum* on *Chrysanthemum* sp. in laboratory and net-house conditions at the Plant Protection Department, College of Agriculture and Applied Biology, Can Tho University are investigated. The effect of fourteen compounds were recorded at 24, 48 and 72 hours in laboratory condition, in which, three treatments applied with *Streptomycin* + *Oxytetracycline*, *Oxytetracycline hydrochloride* + *Gentamicin sulphate* and *Oxolinic acid* had high antagonistic effect on bacterial wilt caused by *Ralstonia solanacearum* on chrysanthemum. Therefore, these three sets of antibiotic and chemical compounds are used for assessing of the effectiveness in controlling bacterial wilt caused by *Ralstonia solanacearum* on chrysanthemum in net-house conditions. In this condition, the effect of three sets of antibiotic and chemical compounds were recorded at 6, 10, 14, 18, 22 and 26 days after inoculation that all treatments applied with compounds showed effect in reduction of bacterial wilt disease level. The treatment applied with *Streptomycin* + *Oxytetracycline* and *Oxytetracycline hydrochloride* + *Gentamicin sulphate* were more effective than treatment applied with *Oxolinic acid*. Therefore, these two sets of antibiotic and chemical compounds can be used for controlling bacterial wilt disease of Chrysanthemum flower in the field condition.

Keywords: *Chrysanthemum*, *oxytetracycline*, *ralstonia solanacearum*, *streptomycin*.