

**DETERMINATION ANTIBACTERIAL ACTIVITY OF
ACTINOMYCES ISOLATES ON *COLLETOTRICHUM SP.*
CAUSING ANTHRACNOSE DISEASE ON CITRUS IN
MEKONG DELTA**

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Summary

The research was executed in the laboratory of Plant Protection Department, Can Tho University to screen *Streptomyces* spp. isolates able to high against *Colletotrichum* sp. causes anthracnose disease on citrus. Testing inhibiting ability mycelium growth of *Colletotrichum* sp. by 32 *Streptomyces* spp. isolates was evaluated on PDA media with 5 replications; result showed that three isolates possessed high antagonistic effect (i.e. CT16-HG, HB2-BL and LM6-HG) with high inhibition zone from 6.60 to 7.88 mm and antagonistic effecicacy over 50% at 6 days after inoculation. Testing inhibiting ability sporulation of *Colletotrichum* sp. by 8 *Streptomyces* spp. isolates (LM6, LV5-ĐT, CT16-HG, MT10-ST, HB2-BL, MT4-ST, LV7-ĐT, TÔ10-VL) was evaluated on PDA broth with 4 replications; result recored that HB2-BL isolate have the highest inhibition effecicacy with the lowest log's conidia concentration is 4.75, wherease, control is 6.95 at 11 days after shaking. Testing inhibiting ability conidia germination of *Colletotrichum* sp. by 8 *Streptomyces* spp. was executed with 4 replications; result indicated that LM6-HG isolate have the highest inhibition effecicacy with the lowest rate's conidia germination (3.35%) compared to control (96.76%) at 24 hours after treatment.

Key words: Actinomyces, anthracnose on citrus disease, conidia germination, inhibition, sporulation.