

CHAPTER VI

CONCLUSION

In this study, thirty five isolates of *Streptomyces* were obtained from twenty-four soil samples collected from various source in Thailand. They were able to produce antibiotics against the test organisms, *Bacillus subtilis* ATCC 6633, *Candida albicans* ATCC 10231, *Escherichia coli* ATCC 25922 and *Staphylococcus aureus* ATCC 25923.

Only strain CB5-3 inhibited *Candida albicans* ATCC 10231. This strain was selected for further study in morphological, cultural, physiological and biochemical characteristics. It was identified as *Streptomyces hygroscopicus*. The best medium for antibiotic production of this strain was PY compared with eight various media. The fermentation broth of 20 liters was extracted with isobutanol and isolated by chromatography. The crude extract showed an active spot at R_f value =0.7 (ethyl acetate : methanol : water = 6 : 4 : 1) by bioautographic method. The fraction D4 was shown to be active against *Candida albicans* ATCC 10231 by agar disc diffusion method.