



CHAPTER V

CONCLUSION

The endophytic fungus ARE-1 was isolated from the surface-sterilized leaf of *Annona reticulata* L. (Annonaceae). In the present investigation, five known compounds were isolated from YES culture of the endophytic fungus ARE1. They were succinic acid monoethyl ester, phenylacetic acid, 2(4'-hydroxyphenyl) ethyl acetate, 4-hydroxyphenethyl alcohol or tyrosol and ergosterol. Ergosterol was found to exhibited weak activity against *Mycobacterium tuberculosis* with the MIC value of 12.5 µg/ml. Both ergosterol and succinic acid monoethyl ester were inactive toward the malarial parasite *P. falciparum* K1 strain. Based on morphology, the fungus isolate ARE-1 was found to be *Mycelia sterilia*. Based on nucleotide sequences of ITS1-5.8S-ITS2 region of rRNA gene, it was classified in family Valsaceae with evolution closely related to *Diaporthe caulivora*.

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย