

CHAPTER V

CONCLUSION

In previous studies the important chemical constituent of various hallucinogenic mushroom in genus *psilocybe* were psilocin and psilocybin. In this research hallucinogenic mushroom *Psilocybe samuiensis* from Koh Sami, Surat thani, Thailand was selected to cultivate and investigate the chemical constituents. From these studies the main chemical constituent of *Psilocybe samuiensis* cultured in MEB was *ent*-2,3-secoaromadendrane-2,10,12-triol (**1**) and the presence of a small of *ent*-2,3-secoaromadendrane-2-methoxy-10,12-diol (**2**).

Compound **1** was tested for cytotoxic activity against five human tumor cell lines including SW620 (colon), BT474 (breast), KATO-3 (gastric), HEP-G2 (hepatoma) and CHAGO (lung) and antimicrobial activity towards 5 microorganisms consisting of *Bacillus subtilis*, *Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa* and *Candida albicans*. The results showed that compound **1** was inactive against all of those tumor cell lines and those five microorganisms.