

## CHAPTER V

### CONCLUSIONS

Clausena cambodiana Guill., a member of the Rutaceae family, has been used as a folkloric medicine in the southern part of Thailand for many purpose such as dermatological, stomachica etc.

In the isolation of Clausena cambodiana Guill. root bark, yield clausenidin (5.3 %) , clausarin (0.3 %) dentatin (3.0 %) , nordentatin (0.1 %) and xanthoxyletin (0.15 %). Another compound which was obtained from epoxidation of clausenidin, yield 35.7 % of clausenidin epoxide. All of the isolated compounds were characterized by using physical and chemical method.

There was no report about  $^{13}\text{C}$  NMR of the compounds that were isolated from these plant before. This work was to assign the chemical shift of carbons in the compounds by Off - resonance , proton noise decoupling and gated decoupling techniques to observe long - range coupling. Some signals that have similar chemical enviroment, the chemical shift may be reversed which needed the selective decoupling technique to discriminate them.

Some confusion of the correct structure of dentatin was solved by the NOE experiment .This

experiment showed that dentatin has linear pyranocoumarin structure.

For the further study , there have new report about new simple coumarins that was isolated from the plant in this genus (44). There may be some exciting new compounds that have never been isolated from Clausena cambodiana Guill.



ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย