

## CHAPTER IV

## Conclusions

Recently, there are many reports concerning about usefulness of folkloric medicinal plants of Thailand. Some reports stated that root bark of Samui hom ( *Clausena cambodiana* Guill), a local plant from southern province of Thailand(1) is commonly and widely used as stomachica, astringent and for dermatological purposes.

The investigation root barks of this plant has aimed to those active ingredients, especially coumarin, to be used as medicine. Coumarins was reported in many fields of medical sciences to be used as drug for treatments of several diseases. Some reports concerned about treatments of carcinoma, skin cancer in experimental animals. The results of this experiment also found that three coumarin compounds, namely dentatin, clausenidin, and xanthoxyletin, were constituents present in root bark of Samui hom. All of three compounds were analysed on the basis of chemical and spectroscopic methods. These compounds have formerly been reportedly discovered, also some reports about their structures and pharmacological actions. Clausenidin, the most founded coumarin compound in this plant, has further undergone experimental chemical

reactions on alkaline hydrolysis that it can form new compound by cleavage the lactone ring and cyclization to form five membered ring compound in the form of potassium salt. The new product was treated with hydrochloric acid in order to eliminate potassium ions. After recrystallization, the pure compound-4 was obtained. This reaction appeared specifically to clausenidin because only one product was found and also changed physical properties from the precursor (clausenidin). From my opinion, it should undergo a further study about this product, especially in the interests of its pharmacological actions, because clausenidin, a precursor of this product, is quite a compound which can commonly be found among various species of plants in Thailand.