

CHAPTER V



CONCLUSION AND RECOMMENDATION 1

In this work, barakol was isolated from the fresh young leaves of Cassia siamea Lamk. by 5% acetic acid solution followed by careful neutralisation with the strong ammonium hydroxide solution. The young leaves of this plant might contain 5-acetyl-7-hydroxy-2-methylchromone which change to the barakol (3a,4-dihydro-3a,8-dihydroxy-2,5-dimethyl-1,4-dioxaphenalene) with the acid treatment in the process of extraction.

Many chromones have considerable physiological activities, for example: khellin, a furanochromone from Ammi visnaga Lamk. has spasmolytic activity to bronchial muscle, bile duct, gall bladder and urinary bladder⁽¹⁶⁰⁾. The extract of this plant has long been used against bronchial asthma or similar spasm in case which adrenaline or aminophylline is not effective. Similarly 2-methyl substitute simpler chromones have the same activities, while the related β -diketones are inactive. On the other hand 2-arylbenzofurans relax spasm due to histamine and acetylcholine more effectively than khellin, but they cannot be used clinically because of their oestrogenic properties⁽¹⁵⁸⁾.

Cassia siamea Lamk. leaves have been used as food and folk medicine and it contains 2-methyl substitute in the form of chromone or artifact barakol. Further investigation on physiological action of these compounds (chromone and barakol); and the confirmation of the presences of the poisonous alkaloid in the leaves are recommended.