CHAPTER I

INTRODUCTION

Aglaia edulis A. Gray is a tree of medium size in the genus *Aglaia* belonging to the family Meliaceae. Its leaves are 3/4-2 ft. long with of leaflets 2-9 by 1-3 in. arranged opposite or subopposite elliptic of or oblong obtuse or acuminate, not trifoliolate. The petiolule is 1/8-1/3 in. long, subglabrescent or scattered beneath as well as the shoots infloresence and fruit with ferruginous scales mixed sometimes with stellate hairs. The panicles are in pyramidal shape, shorter than the leaves. The flowers are small and shortly pedicellate. The size of fruits are more than 1 in. in diameter. The shape is subglobose. These fruits are edible with the succulent integument of the seed eaten. The plant was distributed in Borneo and Fiji Islands (Hooker, 1875). According to Smitinand (1980), *Aglaia edulis* A. Gray is known in Prachuap Khiri Khan, Thailand, as "Kho laen" (คอแลน). It can be found along Pa-la--uu Waterfall steam, Kangkrajan National Park, Prachuap Khiri Khan,Thailand.

Several species in the genus *Aglaia* have been used ethnomedically in many countries, for example :

Aglaia odorata Lour., known as Shu-Lan in Taiwan, it has been used in the treatment of cough and inflammation, as well as traumatic injury. In Thailand, it is

prescribed as a heart stimulant and febrifuge and also as an expectorant. (Janprasert *et al*.,1993)

Local residents of Nakornnayok Province, Thailand, believe that the roots and leaves of *Aglaia pirifera* Hance can induce vomiting and are useful antidotes for poisoning. (Saifah, Jongbunprasert and Kelly, 1988)

Aglaia roxburghiana Hiern, used as a drug in the traditional systems of medicine in India, has been reported to possess a number of pharmacological properties such as diuretic, abortifacient, antileprosy, antitumor and antidysenteric. (Vishnoi, Shoeb and Kapil, 1988)

To the present, there have been several studies on biological activities, pharmacological activities and chemical constituents of several species of the genus *Aglaia*. Terpenoids (Shiengthong *et al*., 1965), alkaloids (Hayashi *et al*., 1982) and other groups of compounds (Ko *et al*., 1989) were found, some of which were biologically active. It is the purpose of this investigation to study, the nature of the compounds in the leaves of *Aglaia edulis* A. Gray. The result may serve as an additional information on the chemical nature of this family, which can be a valuable lead in the field of chemotaxonomy.