CHAPTER I



INTRODUCTION

Aglaia rubiginosa (Hiem) Pannell distributed in southern part of Thailand, Perak, Selangor, Johore, Malacca, Singapore, Sumatra, Borneo, and the Phillippines. According to Pengklai, Niyomdham and Ueachirakan(1991), Aglaia rubiginosa (Hiem) Pannell. is known in Thailand as "Chomphuu Samet (ชมพู่เสม็ด)". It can be found in peat swamp forest, Narathiwat province, Thailand. (Pengklai, Niyomdham and Ueachirakan, 1991).

Mabberley and Pannell (1989a) described Aglaia rubiginosa (Hiern) Pannell as follows:-

"Big tree to 35 m. tall, with an open crown formed by a few ascending branches terminating in up to 40 subcrowns. Bark flaking in squarish scales 2-3 cm. across; inner bark pale pinkish brown, wood orange or pale yellow, latex white. Twigs stout with dense reddish brown or dark brown stellate hairs. Leaves to 80 cm. long; leaflets 15-21, 5-25x2-7 cm, leatherly, upper surface dark shiny green and pitted; lower surface with dense reddish-brown scales; viens 11-24 pairs. Flowers large, to 9 mm. long; calyx cup-shaped and shallowly 3-lobbed; petal 3; staminal tube ellipsoid, the aperture to 1.5 mm. with the anther just protruding; anther 6. Fruit c. 10 cm long, ellipsoid, dehiscent; loculi 3 each containing 0 or 1 seed."

Several species in the genus Aglaia have been used ethnomedicinally in Thailand and many countries for example:

In Tiwan, Aglaia odorata Lour. has been used in the treatment of cough and inflammation, as well as traumatic injury. In Thailand, it is prescribed as the 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)

In India, Aglaia roxburghiana Hiem has been used as a drug in the traditional systems of medicine and has been reported to possess a number of pharmacological properties such as diuretic, abortifacient, 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., 1992) were found, some of which were biologically active. The alkaloids found in the several species of genus Aglaia posses bisamide structure (Saifah et al., 1993). The purpose of this investigation is to study, the nature of the compound isolated from the leaves of Aglaia rubiginosa (Hiern) Pannell. 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.

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