

## CHAPTER I



### INTRODUCTION

*Cassia garrettiana* Craib (*C. racemosa* Mill.) known in Thai as "Sā-mae Sahn" (แสมสาร). This Caesalpinaceous plant is also known in various local names in Thailand as Khi-lehk-khok "ชี้เหล็กโคก", Khi-lehk-pae "ชี้เหล็กแพะ" (North), Khi-lehk-paa "ชี้เหล็กป่า" (North and North East); Khi-lehk-sarn "ชี้เหล็กสาร" (Prachin-Korat), Ga-bat "กะบัด" and Gra-bat "กราบัด" (Chaobon Korat) Ga-laa-bat "กะลาบัด" (Korat), Ngai-saan "ไผ่ชาน" (Khmer-Surin).<sup>1,2</sup> It is a tree with setting yellow flowers growing throughout Thailand. Young leaves and flowers can be used as vegetable after proper preparation by boiling in water and the water extract is discarded. In domestic medicine its heartwood is used as laxative and as blood purifier especially in women,<sup>2,3</sup> and the leaves prepared by the same method as that of *Cassia alata* Linn. i.e. leaves pounded with cloves of garlic and coconut oil are used as an antiparasitic drug and for curing herpes.<sup>3</sup>

Leaves of various *Cassia* species have been subjected to chemical investigations, and a considerable number of anthraquinone compounds have been isolated. The species which have been investigated for these compounds are :- *Cassia acutifolia* Delile<sup>49,50</sup>  
*C. alata* Linn.<sup>51</sup> *C. angustifolia* Vahl,<sup>49,50</sup> *C. javanica* Linn.,<sup>55</sup>  
*C. mimosoides* Linn.,<sup>57</sup> etc.

It is expected that the leaves of *Cassia garrettiana* Craib

might contain some anthraquinone compounds, hence identity test, extraction, isolation and separation methods for anthraquinone compounds are employed in this work, in order to search for the therapeutic substance (s) . The present work is preferred to carry out on the leaves because of their profusely abundance and all year round supply and to avoid injuring the trunk by stripping off the bark, retarding its growth by cutting the root and even more disadvantage by cutting down trees to obtain the heartwood.