

CHAPTER I

INTRODUCTION

Today, most of the people in the world have increasingly interested in health care. Many complementary therapies have changed the use of pharmaceutical drugs into increasingly herbal products, and there have been the growing popularity of complementary therapies. For the popularity of the use in herbal products has increased for much complementary therapy, the scientist is increasingly researches medicinal herbs for new drugs, healthy products, dietary supplements and cosmetics. An adaptation for the full benefit of medicinal herbs must complement a property of these medicinal herbs. The properties such as physiological, chemical, biological, pharmaceutical and clinical are studying in medical herb. In addition, the study in efficiency and safety are using herbal medicines.

One of the Thai medicinal herbs is Kwao Krua, the white Krao Krua(*Pueraria mirifica*), red Kwao Krua(*Butea superba* Roxb.) and black Kwao Krua (*Mucuna collettii*) [1].

In the modern time the white Kwao Krua is a medicinal herb which has full researched success and proof the beneficial effect for food supplement products and cosmetics. It was founded that white Kwao Krua contains phytoestrogens in a more concentrated form. In the early 1960s, British researchers reported potent estrogenic effects of miroestrol, the key phytoestrogen of white Kwao Krua, on ovariectomized rat's immature female rats, and female human volunteers [2]. The red Kwao Krua has less investigated in both chemical structures and biological activities. This research is focus on studying the properties of red Kwao Krua in both chemical structures and biological activities. It is believed that the established data should be used for the

support of the developments of products for human consumption with safety and efficacy.

Objective

1. To extract, isolation and purification of crude extracts of tuberous roots of *Butea Superba* Roxb.
2. To examine the biological activity of isolated compounds.