

Standard Pharmacognostic Characterisation of Fak khaao as Pharmaceutical Preparation for Skin Diseases Treatment

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ABSTRACT

Fak khaao, Thai local name, has been used for dietary as well as medicinal purpose in Thai Traditional Medicine, for example, antimicrobial activity, anticancer, antioxidant agents and antidiabetes, etc. (Putiyanan, 2004). The aims of this work were to collect and identify botanical name of Fak khaao, Momordica cochinchinensis (Lour.) Spreng., as a voucher specimen and to standardize pharmacognostic characters for quality controlling of the material before the formulation process. The macroscopic characters were studied for sample collecting and microscopic characters of transverse section of Fak khaao's leaves were compared to the leaf powders showing the upper and lower epidermis, trichome, collenchyma, palisade mesophyll, spongy mesophyll, stoma (guard cell), vascular bundles, etc., which were similar to microscopic description of drug powders. The values of stomatal index, veinlet termination number, vein-islet number and palisade ratio were calculated for standardization of samples which were 11.84 ± 1.77 , 5.95 ± 1.31 , 2.38 ± 0.40 and 4.49 ± 0.73 , respectively. The results established the standard characters of Momordica cochinchinensis (Lour.) Spreng., being botanical name of Fak khaao, which can be used to produce leaf extract preparation for the treatment of skin diseases.

Key words: *Momordica cochinchinensis* (Lour.) Spreng., Fak khaao leaf, Standard pharmacognostic

INTRODUCTION

“Fak khaao” is indigenous of Thailand (Putiyanan, 2003). It has been used for dietary as well as medicinal purpose in Thai Traditional Medicine, for example, antimicrobial, anticancer, antidiabetes and antioxidant agents. It was found that most researches emphasized on the fruits and the roots of Fak khaao (Yeung et al., 1987). However, this study focused on using Fak khaao's leaves which are valuable parts of this plant, thus, helped conserve natural resources.