

Pharmacognostic Identification and Demonstrative Garden for Planting and Producing Medicinal Herbs for Primary Health Care

Somporn Putiyanan*

*Department of Pharmaceutical Sciences, Faculty of Pharmacy, Chiang Mai University,
Chiang Mai 50200, Thailand*

**Corresponding author. E-mail: somporn@pharmacy.cmu.ac.th*

ABSTRACTS

This research reports the identity of popular and useful medicinal plants which have been sampled. These plants were selected based on the parts used, viz., leaves (6 species), flowers and floral parts (4), fruits (8) and seeds and seed parts (7). Each medicinal plant included the botanical name, family name, common name, part used, active constituent, utility, characteristic of powdered drug, microscopic character of the powder and also powdered drugs that have been registered and currently being used. The reference details of each species are also given.

Key words: Primary health care, Pharmacognostic identification, Demonstrative garden

INTRODUCTION

Evaluation of medicinal plant means the approval of quality and identity of that medicinal plant which contains no adulteration or contamination that can reduce the efficiency of its medicinal capabilities. First of all, the identification of medicinal plant has to be done. Macroscopic identification is the investigation of shape, size, color and taste by the organoleptic (physical) method (hands, ears, eyes, nose and tongue) to study and develop skills to generate the expertise for medicinal plant identification, using both fresh and dry specimens. Secondly, microscopic identification is done by investigating the specimens through microscope (Fahn, 1969; Youngkens, 1951). The preparation of samples is to cut the specimens to pieces or grinding to powder, then dying with specific stain solution to see more clearly similarities and differences about cell type, characteristic and component. Thirdly, the constituent of medicinal plant has to be studied. These plant constituents are synthesized by plants. The constituents that are extracted from plants are mostly related to taste and properties which involves tradition Thai medicine. Taste is important in medicinal plants in traditional Thai medicine. Tastes and its constituents are: bitter-sour taste such as tamarind leaf which contains tannins; sweet taste as Indian licorice leaf which has sugar; nutty taste, e.g., water mimosa and beans which contain fat proteins; salty taste, e.g., galingale which has salt; sour taste, e.g., tamarind fruits which contain organic acids; bitter taste as Cassia and Momordica, which have