## **CHAPTER 1**



## INTRODUCTION

Tropical rainforest inhabits 25-30% of the world's bryophytes or 3,000-4,000 species of mosses and liverworts, more species than any other ecosystems. The bryophyte diversity increases in richness ranging from lowland rainforest to lower montane and then to upper montane forest. As a tropical country, Thailand includes several high mountains, a lowland central plain dominated by the Chao Praya River, and undulating dry upland plateau bordered by the Mekong River. The climate is characterized by the alternation of N.E. and S.W. tropical monsoon system which reserve its cycle seasonably. This variability in topography and climate has produced a diversity of vegetation that includes a large number of bryophytes. However, the knowledge on bryophyte diversity of Thailand is still limited. So far, about 237 genera and 925 species were recorded from the whole country (Sornsamran & Thaithong, 1995).

Huai Yang Waterfall National Park is located at the narrowest point of the country, in Tub Sakae and Bang Saphan District, Prachuap Khiri Khan Province. Geographically, this is a transitional zone from southwestern to peninsular floristic region. Khao Luang mountain is the highest peak in the park, vegetation includes dry evergreen forest at lower elevations, and hill evergreen forest at higher elevations. It is interesting to investigate bryophytes diversity in this area. Since this mountain is part of Tanao Sri range and Khao Luang is one of the high peaks in this mountain range. This area is rich in biodiversity, and may be the northern most limit of the Malesian element as well as the meeting point of plants from the Indo-Burmese element, Indo-Chinese element and Malesian element based on the result of pteridophyte diversity (Yuyen and Boonkerd, 2002). Accordingly, this research aimed to verify whether the above suggestion on floristic composition will be applied to the other plant groups or not. From the literature review, it was found that the plant diversity of the southwestern floristic region has not been as frequently investigated as that of the other part of the country. However, some botanical expeditions were made in Kanchanaburi Province, but they mainly focused on vascular plants. Therefore, the knowledge on bryophyte diversity in this floristic region is rather behind. Consequently, botanical surveys of bryophytes diversity in this region are necessary to gain more knowledge on species diversity as well as geographical distribution of this plant group.

## Aim of this Thesis

This work aimed to conduct a botanical inventory of bryophytes at Huai Yang Waterfall National Park, Prachaup Khiri Khan Province.