

Introduction

Although the Culex mosquitoes are very common, and familiar in Thailand because of their annoyance and blood sucking habit of females. Not much attention has been paid to this kind of mosquito; because not many culicine mosquitoes do transmit disease in Thailand. Eventhough some species of Culex play an important role in the transmission of filariasis in neighbouring countries such as Burma, and one species is a very important vector of Japanese B encephalitis in Thailand. Very little is known about Culex species in Thailand until Thurman (1955) reported his study using mosquito light trap at Chiangmai and listed the species of the genus Culex found. Later the work of Bram (1967) has greatly increased the knowledge of Culex fauna of Thailand.

More taxonomic attention are gained on the genus Culex after the work of Thurman and further studies are progressively being done. However very little is known about Culex species in the biological point of view.

The main purpose of this study is to obtain as much basic information as possible and be familiar with general characters and chaetotaxy of the members of the genus in order to prepare for further studies on complete life cycle of the local culicine mosquitoes which is still very much lacking.

Khao Yai National Park has been selected as the collecting ground because of its geographic situation, evergreen and tropical monsoon forest. The park is located in the provinces of Nakorn Nayok,

Prachinburi, Saraburi and Nakornrajsima; roughly between latitude 14°5' and 14° 15' North and longitude 101° 5' ^{and 101°50} East. It consists of forested hills and valleys at the altitude of about 450 - 1400 meters. There are different types of mosquito breeding sites according to the ~~terrain~~ ^{terrain} and climate during the year such as rockholes, artificial containers, bamboo, swamps, stream margin and so on.

The first step in ^aapproaching the purpose of the present study was to survey and analyse taxonomically the number of Culex species found in accessible areas in Khao Yai National Park. The study will include the morphological variation of different stages in the life cycle of the species present; the analysis of the effect of ecological differences upon the variation in morphology and to provide identification characteristics of species of medical importance.

The majority of the collections have been limited only to the accessible areas and at altitude approximately ranging from 800 to 1200 meters, no collection has been done in the interior of the forest and no collection at all were attempted from many inaccessible areas. This study was based largely upon pinned and slide mounted specimens collected from October 1967 through October 1968. During the period, specimens were collected 8 times, and generally over all seasons. The working period was about 5 - 7 days each time.