



CHAPTER IV

CONCLUSION AND DISCUSSION

The lithostratigraphy and palynostratigraphy from Mong Korn sand pit are suggest a sedimentation in meandering river system. The dominant evidences for interpreted this occurrence includes the gravel beds, together with water-logged plant and partly consolidated block of mud eroded locally from the channel wall. Trough cross bedding and cross lamination which are preserved in fining-upward sequence (Walker, 1984), that were foud in this location. The abundance of spores and pollen of *Ceratopteris* spp. is an aquatic plant, which grows in swamp or lake beside river.

The lithostratigraphic study of Mong Korn sand pit can be classified into thrid units as follow from the top to bottom. Unit 1: Floodpain deposits, Unit 2: Channel deposits and six subunits and Unit 3: Floodbasin deposits.

The palynostratigraphic study of sand pit can be recognized into two zone as follow from the top to bottom. *Pinus* Zone and *Ceratopteris* Zone.

The palynological data from Mong Korn sand pit show are alternation of tropical and temperate paleoclimates. *Ceratopteris* Zone is tropical climate, and *Pinus* Zone is temperate climate. *Pinus* type A is occurrence along a *Pinus* Zone, but number of pollens decrease in the upper part of unit, while spores of *Polypodium* type A, *Cyathea* type B, Dicksoniaceae type A and *Lycopodium* type are increasing.

The age of stratigraphy made from lithostratigraphy associate to palynostratigraphy. They could be interpreted to the boundary of Pleistocene/Pliocene period at the sharp contact hiatus of Unit 3 and Subunit 2.6. Pleistocene/Holocene boundary at the sharp contact hiatus of Subunit 2.1 and Unit 1 (Fig. 8, 10 &11). When the climate is change, the vegetation are moderately to adaptation, but a sedimentation is rapidly to changing. It suggest to the boundary of lithostratigraphic units are adapted before palynostratigraphic unit (Fig. 12).

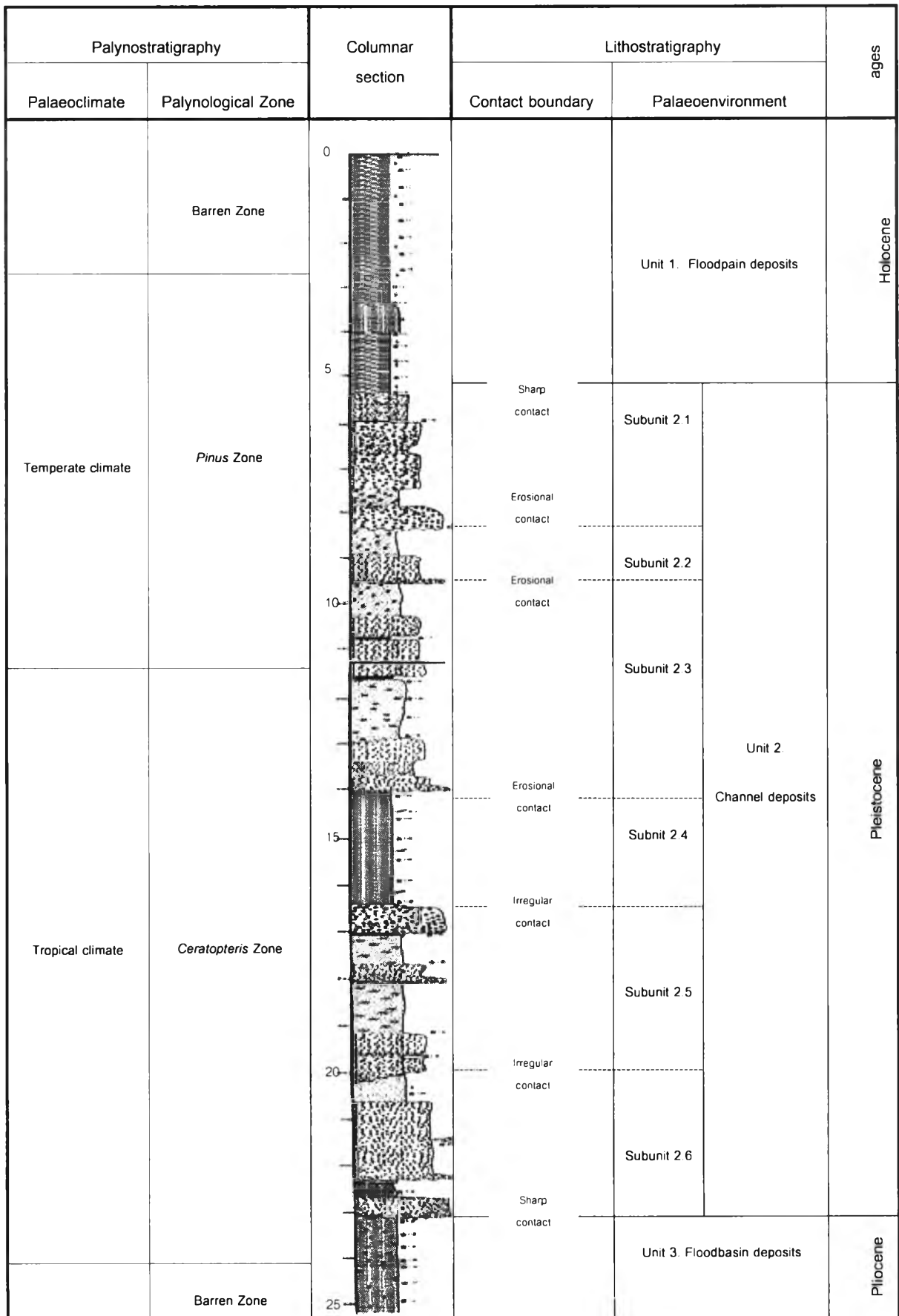


Figure 12 Lithostratigraphic and palynostratigraphic boundaries.

Paleoecological study is palynological techniques for understand the relationships between pollen transport and deposition and surrounding vegetation and climate in study area. The problem for estimating palaeoenvironment and the age of stratigraphy along the Mun river, cause are few stratigraphic markers to determine age, and we lack information which concerning the relationship between pollen deposition and vegetation for the species presents in this locality. Despite the information gained in this study concerning the relationship between vegetation and pollen deposition, the problem of understanding the relationship between climate and vegetation still stands, and this presents a significant problem for future paleostudies in Thailand.