CHAPTER VII CONCLUSION

A quantitative survey of macroinvertebrates in different running waters show relationship to the physico-chemical properties of the water and the habitat quality in dry season and rainy season.

The highest number of families per unit area found at stream site S2 was related to the highest column total score of habitat assessment at that site in the dry season. But in the rainy season due to the road consruction above the stream site S2, the number of families per unit area declined.

The sewage canal always had a lower number of families per unit area than the others. Tubificidae were abundant at sewage canal site SC1.

The cluster analysis(SPSS programme) can be used as a tool to classify the similarity of different running waters either based on the number of families found per unit area or the physico-chemical properties.

The water quality at the Ping River and stream sites was classified in WC 1-3. The water quality in the irrigation canals was classified in WC 2-5. The water quality in the Mae Kha canal was classified in WC 5.

It has been shown that habitat quality and biological condition are related in the stream sites, but that the relationship may differ between seasons or the other reasons.