

## CHAPTER 8

### CONCLUSION

On the basis of the results obtained in this study it can be said that the occurrence of dermatitis is occupation specific occurring amongst paddy field farmers where 47.9% of the farmers are infected (Chapter 4). From the statistical analysis in Chapters 5 and 6 we can safely conclude that the dermatitis among the paddy field farmers in Kota Bharu area, Kelantan is a form of cercarial dermatitis and probably the schistosome cercariae from cattles or ducks. Cercarial dermatitis do affect the socio-economic status of the farmers by incapacitating the infected farmers from working in their fields. The prevalence of infected farmers in the area is high (about 48% of the farmers were affected) and rice production was affected especially since some of these rice growing areas are now under tobacco cultivations. The government should take a serious look at this non-life threatening but debilitating disease.

The study also found that paddy field farmers working during the preparation of fields and transplanting stages are much more likely to contact dermatitis than other stages of farming (Section 5.2). The water source for farming comes from the river and irrigation canals and is highly correlated to dermatitis infection (Section 5.3.1). The rearing of ducks and cows is also closely and positively associated with an increase in the risk of infection (Table 1.1). Ducks and cows are the hosts to a range of schistosomes that occasionally infect humans causing cercarial dermatitis (Kumar and de Burbure, 1986). In addition cercariae isolated from snails collected from the study site when this survey was done had the characteristic forked tail of the schistosomes (Dr. Stephen Ambu pers. comm.)

but identification of the species was not conducted as the samples of the cercariae were not available for further studies.

The results of this study also revealed the importance of cercarial dermatitis in the economic status, by incapacitating the infected paddy field farmers from working in the field (Section 7.1). The government should therefore evaluate the magnitude of the cercarial dermatitis and its impact on the farmers especially in the study area. The need to identify the impacts is a crucial step to prevent future outbreaks and losses incurred by the disease. Efforts should be made to avoid the reoccurrence of the disease among the paddy farmers.

A more in-depth investigation should be done to get a better understanding of the factors affecting the occurrence and prevalence of dermatitis among paddy field farmers in Kelantan. The information in this present investigation is site-specific and could not be extrapolated to represent the actual situation in the country. A country survey should be conducted to get a better view of the incidence and occurrence of cercarial dermatitis amongst paddy field farmers in other areas in Malaysia. Biological and ecological investigations of the schistosomes and cercariae of wild bird and mammal hosts are needed for the formulation of effective management strategies for the control future outbreaks of the disease not only in Kelantan but the whole country. Understanding the exact mode of the cercariae infections and establishing prevailing elements or conditions in cercarial infections would, no doubt, lend insight into better treatment options.