CHAPTER VII

CONCLUSION

In this study we develop three immunological assays including Western blot analysis, indirect immunofluorescent assay and ELISA, for anti-mosquito cell antibodies detection. Moreover, we developed RT-PCR assay to detect dengue RNA in dengue patient's serum during the outbreaks of dengue infection. Since outbreaks of dengue frequently involve more than one serotype, the method that can detect and identify all four dengue virus serotypes using less time consuming, would be ideal and practical. Therefore, the RT-PCR assay is useful in diagnosis of dengue infection.

In this study, we could induce anti-mosquito cell antibodies production in experimental rabbit. After rabbit immunized with mosquito cells, we found specific anti-mosquito cell antibodies in rabbit serum. Moreover, we proved that anti-mosquito cell antibodies present in human's circulation. It is possible that anti-mosquito's saliva proteins, showed in the previous studied, could be antibodies to mosquito cells instead of the saliva protein. There is correlation between results of three assays. All assay show that guard have anti- mosquito cell antibodies more than group of dengue patients. This may be the result of the different exposure to mosquito bite, between guards and dengue patients. These anti-mosquito cell antibodies may act as one of the factors in dengue infection resistance. However, the different level of anti-dengue antibodies produced by each person in dengue endemic area might be the result of the variation of clinical severity.