

## CHAPTER V

### Conclusions and Recommendations

1. Intraspecific genetic differentiation was observed in *P. monodon* based on restriction analysis of the 16S rDNA and an intergenic COI-COII.
2. Two phylogenetic mtDNA lineages (I and II) were found with varying frequencies among different geographic samples of *P. monodon*.
3. Restriction patterns of an amplified intergenic COI-COII digested with *Alu* I and *Taq* I represented frequencies of those phylogenetic mtDNA lineages accurately. Therefore, typing of *P. monodon* mtDNA could be simply reduced from using a battery of restriction endonucleases to either *Alu* I or *Taq* I.
4. Five geographically different samples of *P. monodon* in Thailand could be allocated to two distinct populations (stocks) including A (Satun, Trang and Phangnga) and B (Chumphon and Trat).
5. The first evidence illustrating biased female gene flow in *P. monodon* was observed between Chumphon and Trat. This further indicated that conservation programmes of these life-historically different stocks of *P. monodon* should be carried out.