

## CHAPTER II

### OBJECTIVES

The overall objective of this study was to study the effects of gonadotropin-releasing hormone, and its homologs on androgenic gland and testicular development, testicular lipid profile, and male sex marker in *M. rosenbergii*. Therefore, the specific objectives of this study comprised three parts:

1. To study the effects of serotonin, dopamine, gonadotropin-releasing hormones, and corazonin on the androgenic gland of the giant freshwater prawn
2. To determine the temporal expressions of *MrIAG* in larvae and postlarvae, and use this gene as a marker for selecting male offsprings
3. To investigate the lipid and fatty acid profiles in testes and germ cells during testicular maturation in three developmental male morphotypes by mass spectrometry and associated techniques.