## CONTENTS

1. General Introduction .......................... 1
2. Review of literature .......................... 12
3. Preliminary screening for antibacterial activity of crude extracts from marine invertebrates and fish toxin .......................... 50
4. Anticancer activity of fish *Plotosus lineatus* toxin .......................... 71
5. Isolation of associated bacteria from venom gland of fish *Plotosus lineatus* and screening for bioactivity .......................... 98
6. Pharmacological activity of fish (*Plotosus lineatus*) toxin and associated bacterial metabolites .......................... 116
7. Molecular characterization of the active fish venom gland associated bacterial strain .......................... 160
8. Chromatographic isolation and structural elucidation of active compound from *Staphylococcus equorum* .......................... 173
9. Summary .......................... 195
10. References .......................... 204
11. Publications