## CONTENTS

1. General Introduction 1
2. Review of literature 12
3. Preliminary screening for isolation of antagonistic bacteria from marine sources 45
4. Molecular characterization of the active associated bacterial strains 105
5. Antibacterial activity of marine bacterial metabolites 119
6. Pharmacological activities of metabolites of *Bacillus megaterium* and *Pseudomonas aeruginosa* 140
7. Bioassay guided fractionation and isolation of active metabolites from *Bacillus megaterium* and *Pseudomonas aeruginosa* 154
8. Structural elucidation of the active compound 169
9. Summary 187
10. References 196
11. Annexure - Publications