



3.2.2.4: Sensitivity test of coliform isolates to extracts of medicinal plants traditionally used against diarrhoea by local people	34
3.2.2.4.1: Preparation of plant extracts	34
3.2.2.4.2: Determination of MIC value of medicinal plant extracts against selected coliform isolates	34
3.2.2.5: Determination of PAGE profile of the selected coliform isolates	35
3.2.2.6: Isolation of plasmid of the selected coliform isolates	36
3.3: Statistical analysis	37
<b>CHAPTER 4: RESULTS AND DISCUSSION</b>	<b>40-117</b>
4.1: Physico-chemical parameters	40
4.1.1: Air temperature	40
4.1.2: Water temperature	40
4.1.3: Dissolved oxygen	45
4.1.4: pH	48
4.2: Microbiological analysis	51
4.2.1: Total bacterial count (CFU X 10 <sup>5</sup> mL <sup>-1</sup> ) in the investigated lakes during March 2011 to January 2013	51
4.2.2: Total coliform index (MPN mL <sup>-100</sup> )	56
4.2.3: Faecal coliform index (MPN mL <sup>-100</sup> )	60
4.2.4: Faecal streptococci index (MPN mL <sup>-100</sup> )	64
4.2.5: Identification of coliform isolates	70
4.2.5.1: Biochemical and carbohydrate fermentation pattern of the selected coliform isolates	83
4.3: Antibiotic sensitivity pattern of the selected coliform isolates	86
4.4.1: Sensitivity test of coliform isolates to six traditionally used antidiarrhoeal medicinal plant extracts	94
4.4.2: MIC value determination of the antidiarrhoeal medicinal plant extracts against the selected coliform isolates	101
4.5: Similarity percentage of the protein bands in native PAGE	106
4.6: Plasmid profile of selected coliform isolates	107

<b>SUMMARY AND CONCLUSION</b>	<b>112-113</b>
<b>RECOMMENDATIONS</b>	<b>113-114</b>
<b>REFERENCES</b>	<b>115-154</b>
<b>APPENDICES</b>	<b>A-K</b>