**CONTENTS**

|  |
| --- |
| **Title Page** |
| **CONTENTS** |  |  |  | i – ii  |
| **LIST OF TABLES** |  |  |  | iii |
| **LIST OF FIGURES** |  |  |  | iii  |
| **LIST OF ABBREVIATIONS**  |  |  |  | iv |
| **ABSTRACT** |  |  |  | v |
| **CHAPTER 1 INTRODUCTION** |  | 1-4 |
| **CHAPTER 2 RESEARCH METHODOLOGY** | 5-7 |
| 2.1 Study areas, size and sample collection | 5 |
| 2.2 Preparation of Phosphate buffer (pH 6.5) | 5 |
| 2.3 Preparation of 30% Trichloroacetic acid | 5 |
| 2.4 Silica plates for sample running | 5 |
| 2.5 Standard preparation and selected antibiotics | 5 |
|  |  |
|  **2.6 Method used for Thin Layer Chromatography** | 6 |
|  2.6.1. Antibiotic Extraction | 6-7 |
|  2.6.2 Pointing of Thin Layer Chromatography plate  | 7 |
| 2.6.3 Running of TLC | 7 |
| 2.6.4 Examination of Chromatogram under UV detector | 7 |
| 2.6.5 Determination of RF (Retardation factor) value | 7 |
| 2.6.6 Data Collection | 7 |
| 2.6.7 Statistical Analysis | 7 |
|  |  |
| **CONTENTS (CONTD.)****Title Page** |
| **CHAPTER 3 RESULTS** | 8-12 |
|  3.1 Overall antibiotic residues percentage (%) | 8 |
|  3.2 Specific antibiotic residues percentage (%) | 9-12 |
|  |  |
| **CHAPTER 4 DISCUSSION** | 13-15 |
|  |  |
| **CHAPTER 5 CONCLUSION** | 16 |
|  **ACKNOWLEDGEMENT** | 17 |
|  **REFERENCES** | 18-21 |
|  **PHOTO GALLERY** | 22-23 |
|  **BIOGRAPHY** | 24 |

**List of Tables**

|  |  |  |
| --- | --- | --- |
| **No** | **Title** | **Page** |
| Table. 1 | Overall antibiotic residues percentage (%) of cheavon sample.  | 8 |
| Table. 2 | Positive percentage (%) of studied samples for five antibiotics in cheavon samples. | 9 |
| Table. 3 | Positive percentage (%) of antibiotic in different market samples . | 10 |

**List of Figures**

|  |  |  |
| --- | --- | --- |
| **No** | **Title** | **Page** |
| Fig. 1 | Positive Percentage (%) of Antibiotics in Samples. | 11 |
| Fig. 2  | Percentage (%) of antibiotics in cheavon sample. | 12 |

**List of Abbreviations**

|  |  |
| --- | --- |
| **Abbreviation** | **Elaboration** |
| **ADI** | Acceptable Daily Intake |
| **BBS** | Bangladesh Bureau of Statistics |
| **CFU** | Colony Forming Unit |
| **CTC** | Chlortetracycline |
| **CVMP** | Committee for Veterinary Medicinal Products |
| **DHS** | Dihydrostreptomycin |
| **DLS** | Department of Livestock Services |
| **EC** | European Community |
| **EEC** | European Economic Council |
| **EF** | Enrofloxacin |
| **EU** | European Union |
| **GC** | Gas Chromatography |
| **GDP** | Gross Domestic Product |
| **HPLC** | High Performance Liquid Chromatography |
| **IPCS** | International Programme on Chemical Safety |
| **LOD** | Limits of Detection |
| **LOQ** | Limit of Quantification |
| **MAF** | Ministry of Agriculture and Forestry |
| **MIC** | Minimum Inhibitory Concentration |
| **MRL** | Maximum Residue Limit |
| **MS** | Mass Spectrometry |
| **NO(A)EL** | No observed (adverse) effect level |
| **OTC** | Oxytetracycline |
| **TLC** | Thin Layer Chromatography |
| **UPLC** | Ultra Performance Liquid Chromatography |
| **WHO** | World Health Organization |