

LIST OF TABLES

| TABLE NO. | TITLE | PAGE NO. |
|-----------|--|----------|
| 1.1 | Percentage extractive values of leaves and root bark of <i>A. excelsa</i> | 58 |
| 1.2 | Qualitative chemical tests for different extracts of leaves and root bark of <i>A. excelsa</i> | 59 |
| 1.3 | Elemental analysis of <i>A.</i> leaves and root bark. | 60 |
| 1.4 | Body weight of mice in toxicity studies | 64 |
| 1.5 | Effect of extracts on endogenous antioxidant enzymes in heart | 65 |
| 1.6 | Effect of extracts on cardiac and liver serum marker enzymes | 66 |
| 1.7 | Effect of <i>Ailanthus</i> extracts on weight of rats during treatment | 69 |
| 1.8 | Effect of AEEA on percentage viability of H9c2 cells | 73 |
| 1.9 | Effect of H ₂ O ₂ on AEEA pretreated H9c2 cell viability | 75 |
| 1.10 | TLC fingerprinting for different extracts of <i>A. excelsa</i> leaves after treatment with NP reagent and scanning at 366nm. | 82 |
| 1.11 | Fluorimetric estimation of apigenin in different extracts of <i>Ailanthus</i> leaves | 83 |
| 1.12 | Percentage of quercetin present in different extracts of <i>Ailanthus</i> leaves. | 85 |
| 1.13 | TLC fingerprint for ethyl acetate, chloroform and diethyl ether extract of <i>Ailanthus</i> leaves | 89 |
| 1.14 | TLC fingerprint for Total methanol and successive methanol extracts of <i>Ailanthus</i> leaves | 90 |
| 1.15 | Effect of various extracts of root bark on mice under toxicity study. | 98 |
| 1.16 | Effect of AECHL on complete blood count in rats | 99 |
| 1.17 | Effect of AECHL on serum marker enzymes | 102 |

| | | |
|------|---|-----|
| 1.18 | Effect on Cardiac and liver marker enzymes | 102 |
| 1.19 | Effect of AECHL on Various mechanical properties rat cardiovascular system | 106 |
| 1.20 | Effect of AECHL on Various mechanical properties rat cardiovascular system. | 107 |
| 1.21 | TLC fingerprinting for Alkaloidal fraction of root bark of <i>Ailanthus excelsa</i> | 112 |
| 1.22 | MTT assay for AECHL-1 using H9c2 cells | 121 |
| 1.23 | Effect of AECHL-1 on mechanical properties of rat neonatal myocytes | 125 |
| 1.24 | Effect of AECHL-1 on % viability of B16 cells | 141 |
| 1.25 | Effect of AECHL-1 on % viability of PC3 cells | 142 |
| 1.26 | Effect of AECHL-1 on % viability of MDA-MB cells | 143 |
| 1.27 | Effect of AECHL-1 on % proliferation of PC3 cells | 143 |
| 1.28 | Effect of AECHL-1 on % proliferation of B16 cells | 144 |
| 1.29 | Effect of AECHL-1 on % proliferation of MDA-MB cells | 144 |
| 1.30 | Effect of AECHL-1 and Cis-platin on tumor volume during treatment | 153 |
| 1.31 | Weight variations during treatment | 154 |
| 1.32 | MTT assay for AECHL-2 using H9c2 cells | 162 |
| 1.33 | Effect of AECHL-2 on mechanical properties of rat neonatal myocytes | 174 |
| 1.34 | Estimation of AECHL-2 in different extracts of <i>Ailanthus</i> root bark. | 177 |
| 1.35 | Spectrofluorometric analysis of AECHL-2 in extracts from root bark | 179 |
| 1.36 | Elemental analysis of <i>Butea</i> flowers | 180 |
| 1.37 | Effect of extracts on endogenous antioxidant enzymes in heart | 187 |
| 1.38 | Effect of extracts on cardiac and liver serum marker enzymes | 188 |
| 1.39 | Effect of <i>Butea</i> extracts on weight of rats during | 191 |

| | | |
|------|---|-----|
| | treatment. | |
| 1.40 | Effect of <i>Butea</i> extracts on serum lipid profile of extract treated rats. | 195 |
| 1.41 | Effect of BFEA from <i>Butea</i> flowers on % - viability of H9c2 cells | 197 |
| 1.42 | Effect of H ₂ O ₂ on BFEA pretreated H9c2 cell viability. | 199 |
| 1.43 | Estimation of BFEA-1 in different extracts of <i>Butea</i> flowers. | 204 |
| 1.44 | TLC fingerprinting for butanol fraction of <i>B. monosperma</i> flowers | 206 |
| 1.45 | TLC fingerprinting for ethyl acetate fraction of <i>B. monosperma</i> flowers | 207 |
| 1.46 | Effect of BM1 on endogenous antioxidant enzymes in heart | 213 |
| 1.47 | Effect of BM1 on cardiac and liver serum marker enzymes | 214 |
| 1.48 | Effect of BM1 on weight of rats during treatment | 216 |
| 1.49 | Effect of BM on % - viability of H9c2 cells | 223 |
| 1.50 | Effect of H ₂ O ₂ on BM pretreated H9c2 cell viability | 224 |
| 1.51 | Estimation of BM in various extracts of <i>Butea</i> flowers | 229 |
| 1.52 | TLC fingerprinting for BM1 scanned at 254, 366 and 520nm. | 231 |
