***In-vitro* Antimicrobial Activities of Solanum villosum (L.) Lam; Crude Extract Solvent Comparison**

**Preparation of sample dilutions**

The extract (15mg) was dissolved in 10ml of DMSO; allow the extract to dissolve completely in DMSO. This stock solution 15 mg/10ml was again diluted, thus eight concentrations of the extract were prepared. Dilutions of plant extract with DMSO are Persented in table.

**SI Table 1: Dilution with DMSO (Dimethyl sulphoxide)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Conc. (mg/10ml) | Stock Sol. (ml) | DMSO (ml) | Final Vol. (ml) |
| 1 | 15 | 1.OO | O.OO | 1 |
| 2 | 12.5O | 0.833 | 0.167 | 1 |
| 3 | 1O.OO | 0.666 | 0.334 | 1 |
| 4 | 7.5O | O.5OO | O.5OO | 1 |
| 5 | 5.OO | 0.344 | 0.666 | 1 |
| 6 | 3.OO | O.2OO | O.8OO | 1 |
| 7 | 2.OO | o.133 | 0.867 | 1 |
| 8 | 1.OO | O.1OO | O.9OO | 1 |

Along with these, solutions of standard antibiotic (2 mg/ml of the DOX) were also prepared. The solutions of extracts were used for test. Standard antibiotics and pure DMSO were used for positive and negative control

**SI Table 2: Zones of inhibition (mm) by methanolic plant extract against bacterial strains**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Conc.(mg/10ml) | B.S\* | S.A\* | V.C\* | E.A\* | K.P\* | E.C\* |
| 15 | 9 | 7 | 5 | 5 | 9 | 5 |
| 12.50 | 7 | 5 | 4.5 | 4.5 | 7 | 3.5 |
| 10 | 6 | 3 | 3 | 3 | 6.5 | 3 |
| 7.50 | 3.5 | 2.5 | 2 | 2 | 5 | 2.5 |
| 5 | 2.5 | 1.2 | 2 | 1.5 | 3.5 | 1 |
| 3 | 1.5 | 1 | 1 | 0.5 | 2 | 0.8 |
| 2 | 1 | 0.3 | 0.5 | 0 | 1 | 0.2 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| DOX | 15 | 9 | 10 | 13 | 11 | 5 |

\**Bacillus subtilis (B.S), Staphylococcus aureus (S.A), Vibrio cholera (V.C), Enterobacter aerogenes (E.A), Klebsiella*  *pneumonia (K.P), Escherichia coli (E.C)*

**SI Table 3: Zones of inhibition (mm) by chloroform plant extract against bacterial strains**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Conc.(mg/10ml) | B.S\* | S.A\* | V.C\* | E.A\* | K.P\* | E.C\* |
| 15 | 8 | 6 | 4 | 5.5 | 7 | 3 |
| 12.50 | 7.5 | 4 | 4 | 4 | 6 | 3 |
| 10 | 6.4 | 3 | 3.5 | 3.5 | 5 | 2.5 |
| 7.50 | 5 | 2 | 1.4 | 1.8 | 4 | 1 |
| 5 | 3 | 1 | 1 | 1.3 | 3 | 0.6 |
| 3 | 2 | 0.2 | 0 | 0.8 | 1.2 | 0.2 |
| 2 | 1 | 0 | 0 | 0 | 0.7 | 0 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| DOX | 15 | 9 | 10 | 13 | 11 | 5 |

*\*Bacillus subtilis (B.S), Staphylococcus aureus (S.A), Vibrio cholera (V.C), Enterobacter aerogenes (E.A), Klebsiella*  *pneumonia (K.P), Escherichia coli (E.C)*