

ABSTRACT

Cleome viscosa L. and *Urena lobata* L. were subjected to various pharmacological studies. Standard maceration technique was employed for obtaining different extracts in polar and non-polar solvents, i.e. n-hexane, chloroform, methanol and distilled water. Dried extracts of both plants were further analyzed for physical attributes like texture, color and appearance. Qualitative assessment of extracts demonstrated presence of phytoconstituents i.e. flavonoids, tannins, terpenoids, alkaloids, cardiac glycosides and saponins in different quantity in various extracts of plants. By using ager well diffusion method, antimicrobial activity of both plants was evaluated against four bacterial strains i.e. *Bacillus subtilis*, *Escherichia coli*, *Staphylococcus aureus* and *Pseudomonas fluorescens* and two fungal strains i.e. *Aspergillus niger* and *Penicillium notatum*. With respective zones of inhibition two solvents chloroform and ethanol evinced most promising results against fungal strains in both plants. Maximum inhibition to bacterial strains was offered by seed and root macerates of *Cleome viscosa* L. and *Urena lobata* L. respectively. Standard and commercially used antibacterial and antimycotic drugs showed less activity than crude extracts of plants. Antioxidant activity estimated by ABTS assay revealed that chloroform macerates were most active in both plants. Chloroform extract of legume contain that highest flavonoid content in *Cleome viscosa* L. while in *Urena lobata* L. Chloroform extract of seed exhibited the presence of flavonoids. Maximum phenolic content was present in hexane macerate of leaf in *Cleome viscosa* L. and hexane extract of roots in *Urena lobata* L. Metal chelating in *Cleome viscosa* L. and *Urena lobata* L. demonstrated that chloroform and ethanol extracts contain maximum value respectively. Both plants *Cleome viscosa* L. and *Urena lobata* L. possess significant anthelmintic activity against gastrointestinal tract parasite *Haemonchus contortus*. In *Cleome viscosa* L. seed macerates showed most promising and maximum results while in *Urena lobata* L. root macerates showed most promising and maximum results.