

Abstract

The present study was carried to explore the Ethnopharmacological potential of three local plants; *Cordia myxa* L., *Cordia dichotoma* Forst. and *Cordia gharaf* (Forssk.) Ehren ex Asch. of family Boraginaceae. Maceration was used as a means of extraction of various plant parts in polar and non-polar solvents, i.e. n-Hexane, chloroform, ethanol and water. The crude extracts were found different in appearance, having different color, texture and odor. Some were blackish green, brown, yellow or green in color. The smells were pungent, musky, etc. The extracts were sticky to non-sticky some of the extracts were gell like or amorphous, etc. in shape. The water crude extracts showed maximum percentage yield ranging from 1 to 9.81 %. All the extracts were found containing different phytochemicals as secondary metabolites including, terpenoids, tannins, saponins, reducing sugars, flavonoids, glycosides, alkaloids and anthraquinone. The extracts indicated reasonably good ethnopharmacological potential in terms of their antimicrobial and antioxidant capabilities. The chloroform leaf extract of *C.myxa* showed higher antifungal potential against *Aspergillus niger*, with 45.33 ± 2.33 mm of zone of inhibition. Similarly the n-hexane leaf extract of *C.myxa* indicated higher antifungal potential against *F.oxysporium*, with $31.73-0.49$ mm of zone of inhibition respectively. The ethanolic bark extract of *C.myxa* showed antibacterial potential with 16.46 ± 0.26 mm of zone of inhibition against *E.coli*, while its leaf extracts indicated maximum antibacterial potential against *P. syringae* with 24.5 ± 0.32 mm of zone of inhibition. The distilled water bark extract of *C.myxa* showed maximum antibacterial potential against *S.aureus*, with 23.8 ± 0.43 mm of zone of inhibition as compared to all other crude extracts. The ethanol leaf extracts of *C.dichotoma* showed the antibacterial potential against *Bacillus subtilis*, having 18.63 ± 0.31 mm of zone of inhibition. The ethanol leaf extract of *C. dichotoma* and chloroform leaf extract of *C. myxa* also showed good antimicrobial potential. The MIC values were also recorded. The distilled water stem extract of *C.dichotoma* showed maximum DPPH potential, i.e. 21.91 ± 0.12 as well as maximum FRAP potential, i.e. 13.83 ± 0.33 mM Trolox. The distilled water stem extracts of *C.myxa* showed maximum phenolic content, i.e. 942.32 ± 0.76 $\mu\text{g/ml}$ of Gallic acid while its ethanol bark extract showed maximum metal chelating potential, i.e. 71.32 ± 0.20 %. These results support the traditional medicinal use of these plants by the local inhabitants.