



ABSTRACT

The present research work was carried out on *Boerhavia procumbens*, *Salvadora oleoides* and *Medicago polymorpha*, the agricultural and wasteland plants of Punjab to investigate their ethnopharmacological characteristics, i.e. Antimicrobial, Antioxidant, Anthelmintic and Contact dermatitis. Different polar and non polar solvents were used to get the crude extracts from the powdered plant material. The physio-chemical characteristics, i.e. percentage yield, colour and physical state of these were observed and maximum % yield (2.9%) was observed in macerated distilled water extract of *M. polymorpha* fruit. All plant extracts showed strong antimicrobial activity against pathogenic test organisms, such as *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Escherichia coli*, *Streptococcus faecalis*, *Aspergillus niger* and *Aspergillus oryzae*. Maximum inhibition, i.e. 54 ± 2 mm against *A. niger* was observed by pet. ether soxhlet extract of *M. polymorpha* stem. Three assays, i.e. DPPH, FTC, TBA were used to determine the antioxidant activity and were compared to the standard, synthetic antioxidant. Maximum activity, i.e. 94% was shown by ethanol soxhlet extract of *S. oleoides* fruit using DPPH assay. Strong anthelmintic activity was exhibited by all the extracts. When compared to the standard medicine, Levamisole, maximum activity was shown by chloroform macerated extract of *S. oleoides* fruit. Contact dermatitis activity was also tested but all the extracts were found mammalian skin-friendly as none of the extract caused any skin reaction. Therefore, it can be concluded that these plants contain strong therapeutic agents, responsible for reasonable medicinal action against human ailments.