

Evaluation of *in-vitro* antioxidant activity of *Amaranthus tricolor* Linn.

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Objective: To evaluate the antioxidant activity of different extracts of the leaves of *Amaranthus tricolor* Linn.

Methods: The shade dried leaves of *Amaranthus tricolor* L. was extracted with ethanol (95%) and then partitioned by petroleum ether, chloroform and ethyl acetate. The antioxidant activity of various extracts of *Amaranthus tricolor* was evaluated *in vitro* by free radical scavenging activity (DPPH method) and nitric oxide scavenging activity assay. Ascorbic acid was used as a reference standard.

Results: The ethyl acetate fraction showed the strongest 1,1-diphenyl-2-picrylhydrazyl (DPPH) radical scavenging and nitric oxide scavenging activity among the three fractions.

Conclusion: Our results showed that *Amaranthus tricolor* displayed potent antioxidant properties, supporting the ethno-medical use given to this plant for treatment of diseases.

Keywords: *Amaranthus tricolor* Linn, Antioxidant activity, DPPH, Nitric oxide

Comparative study of hydroalcoholic extracts of *Momordica charantia* L. peel against food spoiling microorganisms

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Search for substances with antimicrobial activity is continuously attempted and medicinal plants are frequently used as remedies for many infectious diseases. The aim of this work was to investigate *in vitro* antimicrobial potential of peels of *Momordica charantia* L. belonging to the family Cucurbitaceae. Extraction was done by cold percolation method. The dry powder was first defatted by hexane and then extracted in pure methanol, pure water and in combination of methanol and water (100% methanol, 75% methanol, 50% methanol, 25% methanol and water). Thus five hydroalcoholic extracts were obtained which was used for antimicrobial study. The antimicrobial activity was done by agar well diffusion method against five Gram positive bacterial, five Gram negative bacterial strains and four fungi. Plant extracts showed more antifungal activity than antibacterial activity. Maximum antimicrobial activity was observed in 100% methanol extract of *M. charantia*. Peels which are normally thrown away as agro waste showed promising antimicrobial activity which is note worthy. The need of the hour is to discover new class of antimicrobial agents to combat multi drug resistant infections.

Biography

Tejas Rathod has completed his M.Sc. from Department of Biosciences, Saurashtra University, Rajkot in the Microbiology and at present he is pursuing Ph.D. from the Saurashtra University. He is awarded with the meritorious fellowship funded by the University Grant Commission, New Delhi. He has presented many papers innational as well as in international level conferences