

3rd International Conference and Exhibition on Biowaivers, Biologics & Biosimilars

October 27-29, 2014 Hyderabad International Convention Centre, Hyderabad, India

Various extracts of stems and leaves of *Abutilon indicum* (Linn) shows antihelminthic and antimicrobial activity

Supriya Ganta^{1,2}, Pusapati Madan Ranjit² and Y Ankamma Chowdary² ¹Vikas College of Pharmacy, India ²NRI College of Pharmacy, India

Introduction: The present study is to show the antimicrobial and antihelminthic activity of *Abutilon indicum* leaves and stems. Antihelminthic activity was performed by using alcoholic extract of stems, carbon tetra chloride, ethyl acetate. Antimicrobial activity is carried out by chloroform extract prepared from leaves using agar-well diffusion method against both gram positive and gram negative microorganisms.

Materials and Methods: *Abutilon indicum* (linn.) leaves and stem are collected. Inoculums were prepared and *in vitro* screening of antibacterial activity was carried out using Cylinder-plate assay method. Test and standard solutions were prepared by dissolving the dried chloroform extracts of leaves of *Abutilon indicum* at different concentrations in DMSO. Plant extracts were prepared.

Results: Chloroform extract of *Abutilon indicum* leaves showed antimicrobial activity against only on Gram +ve microorganism. The extract showed growth inhibition zones against other strains in a dose dependent manner. The antihelminthic activity of alcoholic extract of *Abutilon indicum* stems showed good response on earth worms. The time taken for standard drug albendazole for paralysis of worms was 13 ± 0.5 min and time taken for death iwas 19 ± 0.5 min at 80mg/ml concentration.

Conclusion: Chloroform extract of *Abutilon indicum* leaves showed antimicrobial activity against only on Gram +ve microorganism. Like this, various extracts of this plant showed antihelminthic properties, when compared with standard albendazole. Further studies are needed for the confirmation of antibacterial action and antihelminthic activity of plant by isolating pure chemical constituents and also for the identification of the compound, that responsible for the properties of crude extract of the *Abutilon indicum*.

Biography

Supriya Ganta is pursuing MPharmacy 1st year in Vikas College of Pharmacy in the Department of Pharmacology. She completed her BPharm in NRI College of Pharmacy, Vijayawada in the year 2012. She is very much interested in the research field regarding pharmacology and the related topics.