



ChemTech

International Journal of ChemTech Research

CODEN(USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555

Vol.10 No.9, pp852-858,2017

Antimicrobial Evaluation and Physicochemical Study of *Chenopodium album* against some common Human Pathogens

Pushpander Kumar, Sunil Kumar*

Institute of Pharmaceutical Sciences, Kurukshetra University,
Kurukshetra-136119, India

Abstract: In the present study, we have done antimicrobial study, physicochemical evaluation of the *Chenopodium album* (*C. album*) leaves and roots. Antimicrobial activity was performed by agar well diffusion with six different strains i.e. *Klebsicella*, *P. acne*, *E. coli*, *P. aeruginosa*, *C. albicans*, *S. cerevisiae*. Preliminary phytochemical screening of the plant was done according to WHO parameters for standardization. Physicochemical parameters such as ash values, foreign matter, loss on drying etc. were also determined. The methanolic roots and leaves showed significant antimicrobial activity against *P. acne*, *S. cerevisiae*. Whereas ethyl acetate extract showed mild antimicrobial activity. From microscopy, it contains epidermis, endodermis, collenchymas, mesenchyma, xylem, phloem, and from powdered study it was found that calcium oxalate crystal, stone cells. The microscopic and physicochemical analysis of *C. album* leaf and root is useful in standardization for quality, purity and sample identification. From the study, it was found that plant is having significant antimicrobial activity.

Keywords: *Chenopodium album*, antimicrobial activity, physicochemical parameters.

Sunil Kumar *et al*/International Journal of ChemTech Research, 2017,10(9): 852-858.
