

International Journal of ChemTech Research

ChemTech

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555 Vol.12 No.03, pp 114-120, **2019**

Formulation of an Herbal Substitute for Chemical Sanitizer and its Evaluation for Antimicrobial Efficiency

Dipti Singla^{1*}, Kamna Saini²

^{1*} 154, Maya Garden Enclave, Jakhal Road, Sunam, Punjab, India.
²Assistant professor, Faculty of Life Sciences, Institute of Applied Medicines and Research, Ghaziabad, India.

Abstract : The research was carried out to study the antimicrobial properties of aqueous extracts of perennial plants leaves, that are Eucalyptus, Neem (*Azadirachta indica*) and Sadabhar (*Catharanthus roseus*) using a plethora of techniques such as Finger Imprint technique, Agar well diffusion method and Effect on micro flora. By amalgamating all the results the efficacy of the aqueous extracts observed was in the order, Eucalyptus >Sadabhar(*Catharanthus roseus*)> Neem(*Azadirachta indica*), subsequently. Based upon these results hand sanitizer was prepared using eucalyptus, rose extract and glycerin. The hand sanitizer developed was screened for its antimicrobial activity. The activation time period for herbal sanitizer was observed to be 5minutes while that of alcohol based sanitizer was 1 minute theoretically. To conclude, it can be stated that Eucalyptus leaves have natural antimicrobial properties that can be exploited to eradicate the microbial problems.

Keywords : Aqueous extract, Eucalyptus, Neem(*Azadirachta indica*), Sadabahar(*Catharanthus roseus*), Antimicrobial activity, Hand sanitizer.

Dipti Singla et al /International Journal of ChemTech Research, 2019,12(3): 114-120.

DOI= http://dx.doi.org/10.20902/IJCTR.2019.120318
