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Effect of Topical Herbal Formulations on Antimicrobial and Wound Healing Activity

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The aim of the present work is to develop and standardize the topical herbal formulations using well documented herbs. Topical herbal cream formulations were prepared by using aqueous extracts of *Eupatorium glandulosum* Hook, *Cissus quadrangularis* Linn and mixed extracts of both the plants. The above plants are traditionally used for healing of cuts and wounds. Crude raw materials of *Eupatorium glandulosum* (leaf) and *Cissus quadrangularis* (stem) were collected, shade dried, grinded separately and the moisture free materials were sieved through 100 mesh. The aqueous extracts were prepared by maceration method using above grinded materials and the extracts were formulated into a topical cream formulations individually and combination of both. The prepared cream formulations were screened for their antibacterial and antifungal activity using Gentamycin and Amphoteracin B as standard drug for bacteria and fungi respectively. The wound healing activity was carried out for the formulations using Nitrofurazone 0.2% w/w cream as standard drug. The physical and chemical evaluations were also carried out and compiles as per Pharmacopoeia standards. The present study was observed that the prepared topical herbal cream formulations showed significant antimicrobial and wound healing activities.

Keywords: Eupatorium glandulosum, Cissus quadrangularis, Antimicrobial, Wound healing, Topical cream formulations.