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Formulation of Herbal Soap using extract of Solanum xanthocarpum species

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Abstract: *The therapeutic herbal soap was formulated using selected plant samples Yellow-Fruit Nightshade (Solanum xanthocarpum), Aloe vera (Aloe barbadensis), Wild turmeric (Curcuma aromatica), Coconut oil (Cocos nucifera) and Lavender essential oil. The efficacy of the sample soap was tested and compared with a branded soap. The prepared herbal test sample was analysed for pH, colour, odour, appearance, foam retention, foam height, total fatty matter, alcohol soluble matter and moisture content. The result of the present work was satisfactory as the prepared sample soap was effective against the microbe Staphylococcus aureus and its shelf life was for one month. The formulated soap was orange in colour, smooth textured with aromatic odour. The pH of the sample soap was 8.04, foam height 7 cm, foam retention for over 4 minutes, total fatty matter 0.03%, alcohol soluble matter 25%, and moisture content 1.01%. The prepared test sample and branded soap both were subjected to antimicrobial assay by agar well diffusion technique and zone of inhibition was observed. It was indicated that both formulated herbal soap and branded soap showed zone of inhibition but the prepared test sample was found more effective against Staphylococcus aureus than Staphylococcus epidermis.*

Keywords: *Solanum xanthocarpum, Antimicrobial assay, Agar well diffusion technique, Staphylococcus aureus, Staphylococcus epidermidis.*

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Introduction:

Soap is a salt of fatty acids used in a variety of cleansing and lubricating products. In a domestic setting, soaps are usually used for washing, bathing and other types of housekeeping. In industry soaps are used as thickeners, components of some lubricants and precursors to catalysts. When used for cleaning, soap solubilizes particles and grime which can then be separated from the article being cleaned. Where soaps act as surfactants or emulsifying oils enable them to be carried away by water. Soap is created by mixing fats and oils with a base as opposed to detergent which is created by combining chemical compounds in a mixer. Humans have used soap for cleaning for millennia. Evidence exists of the production of soap like materials in around 2800 BC in ancient Babylon.