

## IRIS

Journal for Young Scientists ISSN 2278 – 618X (Print) ISSN 2278 – 6384 (Online)

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# Antibacterial Property of Herbal Soaps on Daily Encountered Bacteria

Divya Rani
Shivangi Kumari
Tripti Choudhary
Satyamvada Swayamprabha

Received : March 2021 Accepted : July 2021

Corresponding Author : Satyamvada Swayamprabha

Abstract: Herbal soaps are prepared by adding dried medicinal herbs (or flowers and stems of herbs) into soap base to make it more effective. In this study, we observed antimicrobial activity of different herbal soaps on commonly isolated microbes from currency notes and fingernails. We have considered four herbal soaps, Patanjali neem, Himalaya tulsi, Medimix and Khadi naturals lemongrass and their antibacterial activities against isolates from currency notes namely N1 and N2 obtained by spread plating technique and isolate from the human fingernails NA obtained by direct swab method, at two different concentrations were investigated. Effectiveness of these herbal soaps were compared using disc agar diffusion method at 250mg/ml and 500mg/ml. Patanjali and Himalaya showed high efficacy against N1 at 250mg/ml and 500mg/ml

## Divya Rani

B.Sc. III Year, Microbiology (Hons.), Session: 2018 – 2021, Patna Women's College Patna University, Patna, Bihar, India

### Shivangi Kumari

B.Sc. III Year, Microbiology (Hons.), Session: 2018 – 2021, Patna Women's College Patna University, Patna, Bihar, India

#### **Tripti Choudhary**

B.Sc. III Year, Microbiology (Hons.), Session: 2018 – 2021, Patna Women's College Patna University, Patna, Bihar, India

#### Satyamvada Swayamprabha

Assistant Professor, Department of Microbiology Patna Women's College, Bailey Road, Patna – 800 001, Bihar, India

E-mail:satyam.swayam@gmail.com

respectively, while for N2 Patanjali has highest diameter of zone of inhibition. For isolate NA, no zone of inhibition was observed at 250mg/ml concentration whereas, Patanjali again showed the largest diameter of zone of inhibition at 500mg/ml concentration among other soap sample considered.

**Keywords:** Antibacterial activity, Herbal soap, Paper currency, Fingernails, Zone of inhibition.

#### Introduction:

Microorganisms are ubiquitous in the environment and play various important role in natural processes. The microorganisms that live on other living organism (human or animal) or inanimate object without any harm are commonly refers as Microflora. This microflora may become opportunistic pathogens under unhygienic conditions.

The hands of the human body are in most contact with the outside world and so, it is easy for our hands and fingernails to come in contact with different microbes. Washing hands is believed to reduce infection transmission by washing off potential microorganisms and also by removing the dirt, which could also harbor microorganisms and allow their survival for longer periods of time (Lanata, 1994). One of the ways of healthy living is

Vol. XI, 2021 — 52