## IJARSCT



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 1, July 2025



## Formulation and Evaluation of Polyherbal Gel for Psoriasis

Pankaj Shivnathrav Gat, Prof. Khan Tooba, Dr. Bhagyashali Pawar

Gajanan Maharaj College of Pharmacy, Chh. Sambhajinagar

Abstract: Psoriasis is one of the most common skin diseases in humans and affects a major population worldwide. The aim of the present study is to evaluate the efficacy of selected polyherbal formulations against psoriasis-induced secondary infections. Psoriasis is a chronic, immune-mediated inflammatory skin disorder characterized by hyperproliferation of keratinocytes and abnormal differentiation, often leading to physical discomfort and psychosocial distress. Conventional therapies are associated with side effects and limited long-term efficacy, prompting the exploration of alternative treatments. This study investigates the formulation and therapeutic potential of a polyherbal gel comprising Oregon grape, Glycyrrhiza glabra (licorice), Ricinus communis (castor oil), and Mormordica charantia in the topical management of psoriasis.

Each component was selected based on its documented anti-inflammatory, antioxidant, antimicrobial, and skin-soothing properties. The gel was evaluated for physicochemical parameters, stability, and in vitro anti-inflammatory activity using protein denaturation and membrane stabilization assays. In vivo efficacy was assessed using an imiquimod-induced psoriasis-like mouse model, observing reductions in erythema, scaling, and epidermal thickness. Histopathological analysis supported the clinical findings, demonstrating normalized keratinocyte proliferation and reduced immune cell infiltration.

The polyherbal formulation showed significant improvement in psoriatic symptoms without adverse effects, suggesting its potential as a safe and effective complementary therapy for psoriasis. Further clinical studies are recommended to validate its therapeutic efficacy and safety profile in human subjects.

Keywords: Antipsoriasis, herbal gel, herbal medicine

Copyright to IJARSCT www.ijarsct.co.in



DOI: 10.48175/568



702