

Evaluation and Formulation of Herbal Anti-Acne Gel

Vaishanavi S. Tambalkar¹, Rohit R. Kharat¹, Shraddha S. Kamble¹,
Mandar V. Kamble¹, Atharv D. Pawar¹, Dr. Aditya Madhale¹

Yashwant Redeker Collage of Pharmacy, Nesari, Gadhinglaj, Kolhapur, Maharashtra India

Abstract: *Acne vulgaris is a common dermatological condition affecting adolescents and adults, leading to significant psychosocial impacts. Conventional treatments, though effective, often cause adverse effects such as dryness, irritation, and antibiotic resistance. The increasing demand for safer and more sustainable alternatives has led to the exploration of herbal therapies. In this project, an herbal anti-acne gel was formulated using extracts of Neem and Turmeric, known for their antibacterial, antioxidant, and anti-inflammatory properties. The extracts were obtained through Soxhlet extraction using ethanol. The gel was prepared using Carbopol 940 as a gelling agent, with the addition of propyl paraben, CMC, PEG-400, and triethanolamine to optimize stability, pH, and spreadability. The prepared formulations were evaluated for physical appearance, pH, viscosity, spreadability, and washability. Results indicated that the formulations had acceptable physicochemical properties, demonstrating the potential of herbal-based gels as effective alternatives for acne management. This study supports the use of plant-based ingredients in developing safer topical therapies for acne.*

Keywords: Acne vulgaris, Anti-acne Gel, Azadirachta-indica, *P. acne*

