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Formulation and Evaluation of Herbal Antifungal Ointment

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Abstract: A prevalent dermatological issue that frequently calls for safe and efficient treatment solutions is fungal infections. Because herbal formulations are natural, have few adverse effects, and contain strong bioactive components, they present a possible substitute for synthetic antifungal medicines. With their potent antifungal qualities, neem (Azadirachta indica), ginger (Zingiber officinale), garlic (Allium sativum), and turmeric (Curcuma longa) extracts are used in this work to formulate and test a herbal antifungal ointment. To guarantee the right consistency, spread ability, and stability, the ointment was made with the right foundation. To improve antifungal activity, the formulation was modified by extracting and incorporating the active herbal components. Ph, viscosity, spread ability, and stability under various storage settings were among the physicochemical characteristics of the produced ointment that were assessed.. The antifungal activity against common fungal infections including Aspergillus niger and Candida albicans was evaluated using the agar well diffusion method. The findings showed that the herbal ointment had antifungal activity that was considerable and that its inhibition zones were similar to those of common antifungal drugs. Studies on stability verified that the formulation did not degrade over time and continued to be effective. It is even more appropriate for topical use because it doesn't include any dangerous components. As a result, the herbal antifungal ointment that was created offers a natural, safe, and efficient way to treat infectious diseases. It is advised to conduct additional study, including clinical studies, to confirm its therapeutic potential for broad application.

Keywords: Herbal antifungal ointment, Neem, Ginger, Garlic, Turmeric, antifungal activity, formulation, evaluation, *Candida albicans*, *Aspergillus niger*, medicinal plants, topical therapy







