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## Formulation and Dermatological Evaluation of a Skin-Friendly Perfume using Jasmine Flower and Orange Peel Extracts

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**Abstract:** This research explores the formulation of a novel perfume derived from the extraction of jasmine flowers and orange peel, emphasizing the reduction of skin irritation. The study employs a dual extraction method, combining solvent extraction for jasmine flowers and cold-press extraction for orange peel, to preserve the natural fragrance compounds and beneficial properties. We conducted a comprehensive analysis of the chemical compositions of the extracts using gas chromatography-mass spectrometry (GC-MS). Subsequently, various formulations were developed and subjected to dermatological testing to evaluate their potential for causing skin irritation.

The results indicate that the optimized formulation, incorporating specific ratios of jasmine and orange extracts, significantly minimizes skin irritation compared to commercial synthetic fragrances. The perfume not only provides a pleasing and lasting scent but also demonstrates enhanced skin compatibility, making it suitable for sensitive skin. This research contributes to the development of natural, skin-friendly perfumes and offers insights into sustainable extraction methods for the fragrance industry.

Key findings highlight the importance of balancing natural ingredients to achieve both olfactory appeal and dermatological safety. The implications of this study extend to the broader cosmetics and personal care industries, encouraging the adoption of gentler, nature-derived formulations..

**Keywords**: Perfume formulation, Natural fragrance, Jasmine flower extract, Orange peel extract, Ethyl alcohol (ethanol), Maceration process, Essential oils, Fragrance evaluation, Skin compatibility, Aromatic compounds, Perfume stability, Perfume development, Fragrance longevity, Perfume ingredients, Perfume chemistry, Citrus fragrance, Floral fragrance, Perfume quality, Perfume industry, Natural extracts.



