

AN INVESTIGATORY PROJECT OF COMBINING TAMANU LEAVES (CALOPHYLLUM INOPHYLLUM) AND SHEA BUTTER (VITELLARIA PARADOXA)

ABSTRACT

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Tamanu leaves (*Calophyllum inophyllum*) and Shea butter (*Vitellaria paradoxa*) are well known for their beneficial effects on the skin. Tamanu leaves, traditionally used in tropical regions, offer restorative and anti-inflammatory properties, making them effective in treating various skin conditions. Shea butter, highly valued in African cultures, is recognized for its intense moisturizing capabilities, natural sun protection, and healing effects on the skin. This study aims to investigate the potential of combining Tamanu leaves and Shea butter as a natural and effective protective sunscreen. This study utilized an experimental research design with a purposive sampling technique. A survey questionnaire served as the primary research instrument to evaluate the acceptability of Tamanu leaves and Shea butter as a sunscreen formulation, focusing on ingredients and procedure, moisturizing properties, ultraviolet protection efficacy, skin compatibility, and product presentation. The collected data were analyzed using frequency, percentage, weighted mean, and t-test to determine whether a significant difference existed between the evaluations of the two respondent groups. The investigatory results on the combination of tamanu leaves (*Calophyllum inophyllum*) and shea butter (*Vitellaria paradoxa*) as a sunscreen product were rated as “acceptable” in terms of ingredients and procedure, moisturizing property, ultraviolet protection efficacy, skin suitability, and presentation. The chemists recorded an overall mean of 3.10 with a variance of 0.139, while the dermatologists had an overall mean of 3.06 with a variance of 0.340. With a significance level (α) of 0.05, degrees of freedom at 47, a t-critical value of 2.012, and a t-computed value of 0.142, the results indicate no significant difference between the assessments of the two respondent groups. Tamanu leaves and shea butter were found to be acceptable and effective as a sunscreen. However, respondents provided several recommendations for improvement. They suggested using titanium dioxide instead of zinc oxide and reducing the product's thickness for easier application. Additionally, they recommended changing the current jar packaging to one with a metallic cap, including a scoop or magnetic feature, or switching to a pump bottle or tube-type container. Implementing these suggestions is encouraged to enhance the product's quality, usability, and consumer appeal.

RECOMMENDED CITATION

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