ANTIOXIDANT ACTIVITY OF BAMBOO LEAVES ESSENTIAL OIL AND ITS POTENTIAL APPLICATION IN SKINCARE

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Final Year Project Report Submitted in
Partial Fulfilment of the Requirement for the
Degree of Bachelor of Science (Hons.) Applied Chemistry
in Faculty of Applied Science
Universiti Teknologi MARA

AUGUST 2023

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Date: 14 July 2023

ABSTRACT

ANTIOXIDANT ACTIVITY OF BAMBOO LEAVES ESSENTIAL OIL AND ITS APPLICATION IN SKINCARE

The skincare developed by using extraction of *Bambusa Vulgaris* (bamboo leaves). This study is conducted as a result of skin issues such as wrinkles and pigmentation experience by most people. Besides, lack of natural antioxidant skincare in the market is concerning as people nowadays demand natural skincare due to high synthetic chemicals content in other skincare in the market which is not suitable for all skin type. Although this chemical skincare might aid in the treatment of skin problems, it has a number of negative side effects compared to positive results on both users and environment. As a solution to this issue, organic herbal skincare has been created and formulated. Wrinkles have been identified as the most common issue for middle age. This is because human skin is consistently exposed to radicals such as UV rays and other harmful pollutants such as cigarette smoke, also skin collagen will slowly reduce when reach age of 27 years old and above. The polyphenols and phenolic acid in the bamboo leaves essential oil are studied in this investigation since both of these bioactive compounds are responsible for antioxidant properties. The study examined the effectiveness of antioxidants by Radical Scavenging Activity assay. Besides, this study also determined the total phenolic compound in the essential oil. The oil are proven to have the ability as antioxidants as all the assays show positive results. This demonstrates that every essential oil extract has antioxidants agents such as flavonoids, polyphenols and phenolic acid as their compounds. This has demonstrated the possibility of creating skincare from natural sources like *Bambusa Vulgaris* to treat skin issues caused by radical and low deficiency of antioxidants such as pigmentation and wrinkles.

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