

EXTRACTION OF TOCOTRIENOL FROM *Elaeis guineensis* (OIL PALM) FOR ITS ANTIOXIDANT PROPERTIES FOR SKIN PRODUCT

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ABSTRACT

EXTRACTION OF TOCOTRIENOLS FROM *Elaeis guineensis* (OIL PALM) FOR ITS ANTIOXIDANT PROPERTIES FOR SKIN PRODUCT

Skin aging mainly caused by the UV radiation from sunlight which has the negative effects on the skin lowered the antioxidant levels may cause oxidative damage on skin. Although nowadays most popular brand's cream might aid in the treatment of moisturizing the skin, it has myriad of adverse effects on its consumers as well as the environment. Oil palm fruit-based organic antioxidant cream was developed to address this issue. *Elaeis guineensis* (Oil Palm) are extracted for the cream's formulation using Soxhlet extraction technique. The significance of this study is to encounter the widespread promotion of chemical antioxidants cream to consumers. The methanolic extracts of *Elaeis guineensis* will be studied in this research due to its antioxidant properties. This studies examined the effectiveness of palm oil extracts as an antioxidant cream for skin products. This study examined the effectiveness of this extract by using antioxidant assays which comprises of determination of Total Phenolic Content (TPC) and DPPH Free Radical Scavenging Assay. This demonstrates that palm oil extract from *Elaeis guineensis* have antioxidant properties known as tocotrienols. This has demonstrated the possibility of creating cream from natural sources of antioxidant from *Elaeis guineensis*, palm oil extracts since stability tests of tocotrienols on cream was tested which comprises of centrifugation test, pH test, organoleptic test and spreadability test indicated that the formulation is suitable for the development of skin products.

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