

## Crude Palm Oil Antioxidant Extraction and the Antioxidation Activity

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**Abstract :** Crude palm oil (CPO) is a vegetable oil that came from a palm tree bunch. The productivity of the oil is 12 ton/hectare/year. Thus palm oil tree was known as highest vegetable oil yield. It was grown across Equatorial County, especially in Malaysia and Indonesia. The greenish-red color on CPO was come from carotenoid. Carotenoid is one of the antioxidants that could be extracted. Carotenoid could be used as functional food and other purposes. Another antioxidant that also found in CPO is tocopherol. The aim of the research work is to find antioxidant activity on CPO comparing to the synthetic antioxidant that available in a market. In this research work, antioxidant was extracted by a mixture of acetone and n.hexane, while the activity of the antioxidant extract was determined by DPPH method. Antioxidant activity of the extracted compound about 46% compared to pure tocopherol. While the solvent mixture compose by 90% acetone and 10% n. hexane meet the best on the antioxidant activity.

**Keywords :** antioxidant, beta carotene, crude palm oil, DPPH, tocopherol

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