

**STUDI MUTU *CRUDE PALM OIL* (CPO) PADA
PABRIK MINI PENGOLAHAN KELPA SAWIT
(STUDI KASUS KPUD TUPAN TRI BHAKTI
KABUPATEN KUANTAN SINGINGI)**

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Studi Mutu *Crude Palm Oil* (CPO) Pada Pabrik Mini Pengolahan Kelapa Sawit (Studi Kasus KPUD Tupan Tri Bhakti Kabupaten Kuantan Singingi)

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ABSTRAK

Minyak kelapa sawit mentah (CPO) merupakan komoditas perkebunan penting yang berperan besar dalam sektor ekonomi dan industri di Indonesia. Mutu CPO sangat dipengaruhi oleh kondisi TBS dan proses pengolahan di pabrik kelapa sawit. Perbedaan sistem pengolahan antara pabrik mini dan pabrik besar dapat menghasilkan kualitas CPO yang berbeda. Penelitian ini bertujuan untuk menganalisis dan membandingkan mutu minyak kelapa sawit mentah yang dihasilkan oleh pabrik mini KPUD Tupan Tri Bhakti dengan minyak dari pabrik besar sebagai pembandingan. Parameter yang dianalisis meliputi kadar air, asam lemak bebas (ALB), kotoran, nilai DOBI, dan karoten. Penelitian dilakukan melalui analisis laboratorium terhadap sampel CPO dari kedua pabrik, kemudian dianalisis menggunakan analisis deskriptif. Hasil penelitian menunjukkan bahwa mutu CPO yang dihasilkan oleh pabrik mini memiliki kadar air sebesar 0,2203%, ALB 2,0468%, kadar kotoran 0,0264%, nilai DOBI 0,0573, dan karoten 639 ppm. Sementara itu, mutu CPO yang dihasilkan oleh pabrik besar memiliki kadar air sebesar 0,2680%, ALB 3,9959%, kadar kotoran 0,2153%, nilai DOBI 0,0674, dan karoten 607 ppm.

Kata kunci: Minyak kelapa sawit mentah (CPO), Mutu CPO Pabrik Mini Kelapa Sawit, Pabrik, ALB, DOBI.

Quality Study of Crude Palm Oil (CPO) at a Mini Palm Oil Processing Plant (Case Study of KPUD Tupan Tri Bhakti, Kuantan Singingi Regency)

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ABSTRACT

Crude Palm Oil (CPO) is an important plantation commodity that plays a significant role in the economic and industrial sectors in Indonesia. The quality of CPO is highly influenced by the condition of fresh fruit bunches (FFB) and the processing system in palm oil mills. Differences in processing systems between mini mills and large-scale mills may result in variations in CPO quality. This study aims to analyze and compare the quality of CPO produced by the mini palm oil mill KPUD Tupan Tri Bhakti with that of a large-scale mill as a reference. The parameters analyzed include moisture content, free fatty acids (FFA), impurities, Deterioration of Bleachability Index (DOBI), and carotene content. The study was conducted through laboratory analysis of CPO samples from both mills, followed by descriptive analysis. The results showed that the CPO produced by the mini mill had a moisture content of 0,2203%, FFA of 2.0468%, impurity content of 0.0264%, DOBI value of 0.0573, and carotene content of 639 ppm. Meanwhile, the CPO produced by the large-scale mill had a moisture content of 0,2680%, FFA of 3.9959%, impurity content of 0.2153%, DOBI value of 0.0674, and carotene content of 607 ppm.

Keywords: Crude Palm Oil (CPO), Mini Palm Oil Mill, CPO Quality, Free Fatty Acid (FFA), Deterioration of Bleachability Index (DOBI)