Teknik Pemekatan b-Karoten Minyak Sawit dengan Transesterifikasi dan Saponifikasi

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ABSTRAK

Crude palm oil contain carotenoid pigment which has colour red-yellow with 600-1000 ppm β-carotene. The carotenoid pigment especially β-carotene is important of vitamin A precursor. Most of carotenoid's palm oil defective in refining process to produce light-coloured oils. Steps by step concentrated after transesterifcation have done with sodium methoxide catalyst and saponification, soon afterward examining combination of transesterification-saponification technique. Optimum transesterification got by reaction mehanol and crude palm oil with molar ration 8:1, with additional 1% NaOH in temperature 60 °C for an hour, obtained 787.35 ppm total carotenoid with 78.37% β-catotene. Carotenoid concentrated with finest saponification obtained by reaction KOH and crude palm oil with molar ratio 5.78:1 within methanol solvent as much as jive time's weights of crude palm oil. This process obtained 14,970.09 ppm total carotenoid with 78.75% β-catotene hence risen total carotenoid and β-catotene as much as 24 time's of crude palm oil. Saponification process not significant with combination process.

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