PEMBUATAN *VIRGIN COCONUT OIL* DENGAN METODE PEMANASAN DAN ANALISIS PRODUK YANG DIHASILKAN

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh suhu pemanasan terhadap kualitas minyak kelapa yang dihasilkan. Penelitian dilakukan melalui 2 tahap. Tahap pertama yaitu pembuatan minyak dengan variasi suhu pemanasan yaitu 60, 70, 80 dan 90 °C, tahap kedua yaitu analisis kualitas minyak yang dihasilkan berupa warna dan aroma, kadar air, viskositas, turbiditas, kadar asam lemak bebas, bilangan peroksida, kandungan vitamin E dan profil asam lemak penyusun VCO.

Hasil penelitian menunjukan bahwa semakin bertambahnya suhu pemanasan maka semakin tinggi rendemen minyak yang dihasilkan. Rendemen minyak tertinggi terdapat pada suhu 90 °C sebesar 21,25% dan rendemen terendah pada suhu 60 °C sebesar 18,40%. Uji kualitas minyak kelapa yang dihasilkan menunjukkan pada temperatur 60 °C merupakan minyak kelapa dengan kualitas terbaik yang ditandai oleh kadar air sebesar 0,092%, kadar asam lemak bebas sebesar 0,149%, bilangan peroksida 0,279 meq kg^{-1} minyak, kenampakan VCO jernih, aroma khas minyak kelapa, tingkat kekeruhan yang sangat rendah sebesar 0,00 NTU, tingkat viskositas sebesar 41,67 mm^2 s^{-1} dan kandungan vitamin E berupa α-tokoferol sebesar 1,24 μg g^{-1} serta profil asam lemak penyusun VCO didominasi oleh asam lemak rantai karbon sedang (C8-C12) dengan kandungan asam laurat sebesar 46,40%. Parameter kualitas yang ditetapkan memenuhi persyaratan kualitas VCO yang ditetapkan oleh Standar Nasional Indonesia (SNI) 7381:2008 dan *Asian Pacific Coconut Community* (APCC) CODEX STAN 1-1985, Rev 1-2008.

Kata kunci : VCO, metode pemanasan, asam lemak

PREPARATION OF VIRGIN COCONUT OIL BY HEATING METHOD AND ITS ANALYSIS

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ABSTRACT

This research aims to know the influence of temperature on quality of coconut oil produced. This research was conducted through two steps. The first step, namely the produce of oil by temperature heating at 60, 70, 80 and 90 °C, the second step, analysis of the quality of the oil produced such as moisture content, levels of free fatty acids, peroxide value, viscosity, turbidity, color, odour, amount of vitamin E and composition of fatty acids.

The results showed that the increasing of temperature would increases the yield of oil produced. The highest yield was 21.25% which was obtained at 90 °C and the lowest yield was 18.40% which was obtained at 60 °C. Test the quality for the coconut oil obtained at 60 °C indicated that it had the the best quality which characterized by 0.092% of moisture content, free fatty acids number 0.149%, the number of peroxides 0.279 meq kg^{-1} of oil, it clear in appearance, VCO distinctive odour of coconut oil, a very low turbidity level of 0.00 NTU, viscosity 41.67 mm^2 s^{-1} and content of vitamin E in the form of α-tocopherol 1.24 μg g^{-1} as well as the fatty acid profile of the components of the VCO is dominated by the fatty acid chains medium carbon (C8-C12) with lauric acid content of 46.40%. Based on the quality requirements set by Standar Nasional Indonesia (SNI) 7381:2008 and Asian Pacific Coconut Community (APCC) CODEX STAN 1-1985, Rev 1-2008, the VCO which produced has fulfilled quality standard.

Keywords : VCO, heating method, fatty acid