

**PRODUKSI DAN PENENTUAN KUALITAS VIRGIN COCONUT OIL
(VCO) YANG DIHASILKAN DENGAN METODE PENGASAMAN DARI
KELAPA PROVINSI RIAU**

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ABSTRACT

Virgin Coconut Oil (VCO) is a product of coconut fruit (*Cocos nucifera*) that contain of Medium Chain Fatty Acid (MCFA), so it can be metabolized by our body. The objects of this research are to produce VCO by acid method and to determine the quality of VCO. The samples were from Bengkalis, Indragiri Hilir, Pelalawan, and Rokan Hilir. VCO is produced by using acetate acid 25% which has function to free the oil from fat globular membrane that contain of lipoprotein. Because of that, optimum pH must be determined. Determining quality of VCO based on Rancangan Standar Nasional Indonesia 2 (RSNI 2) by using 6 parameters test. The parameters are water value, iodine value, saponification value, peroxide value, free fatty acid value, and concentration of fatty acid. Water value in VCO from each sample are not different significantly ($P>0,05$) about 0,0900 to 0,0975%. Iodine value from each sample are not different significantly ($P>0,05$) about 7,2527 to 7,9819 g iod/100 g sample. Saponification value from each sample are not different significantly ($P>0,05$) about 259,9214 to 267,8649 mg KOH/g fat. Peroxide value from each sample are different significantly ($P<0,05$) with the highest value from Pelalawan (1,5986 mg ek/Kg) and the lowest value from Bengkalis (0,5239 mg ek/Kg). Free fatty acid value from each sample are different significantly ($P<0,05$) with the highest value from Indragiri Hilir (0,3922%) and the lowest value from Rokan Hilir (0,2516%). The result of determined fatty acid concentration is the highest concentration of lauric acid (51,7%) from Pelalawan compared with Bengkalis, Indragiri Hilir, and Rokan Hilir. Based on the result of 6 parameters test, coconut from Indragiri Hilir is recommended as the source to produce VCO.

Key words : Virgin Coconut Oil, fatty acid, Medium Chain Fatty Acid, fat globular membran.