

**PENGARUH TINGKAT PENAMBAHAN ENZIM FISIN KASAR
TERHADAP KARAKTERISTIK VIRGIN COCONUT OIL (VCO)**

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Pengaruh Tingkat Penambahan Enzim Fisin Kasar Terhadap Karakteristik Virgin Coconut Oil (VCO)

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ABSTRAK

Minyak kelapa murni atau *virgin coconut oil* (VCO) adalah minyak yang diperoleh dari daging kelapa tua yang segar dan diolah dengan suhu rendah atau tanpa pemanasan. VCO dapat diperoleh melalui proses enzimatik salah satunya menggunakan enzim fisin. Enzim fisin termasuk enzim proteolitik yang terdapat pada bagian daun, buah, batang dan getah dari tanaman ara (*Ficus sp.*). Penelitian ini bertujuan untuk mengetahui pengaruh tingkat penambahan enzim fisin kasar terhadap karakteristik virgin coconut oil (VCO). Penelitian ini menggunakan rancangan acak lengkap dengan 5 perlakuan dan 3 kali ulangan. Data hasil penelitian dianalisa secara statistik menggunakan ANOVA dan dilanjutkan dengan uji Duncan' New Multiple Range Test (DNMRT) pada taraf 5%. Perlakuan pada penelitian ini adalah tanpa penambahan enzim fisin kasar (perlakuan A), penambahan enzim fisin kasar pada tingkat 0,02% (perlakuan B), 0,04% (perlakuan C), 0,06% (perlakuan D), 0,08% (perlakuan E). Hasil penelitian menunjukkan tingkat penambahan enzim fisin kasar terhadap karakteristik virgin coconut oil (VCO) memberikan pengaruh nyata terhadap rendemen, kadar air, bilangan iod, uji organoleptik pada tingkat kesukaan aroma dan warna. Namun tidak berpengaruh nyata terhadap kadar asam lemak bebas, bilangan peroksida dan uji organoleptik pada tingkat kesukaan rasa. Pada penelitian ini rendemen tertinggi diperoleh dari perlakuan C dengan nilai 26,73%, bilangan iod 9,30 g iod/100g, kadar air 0,0394%, kadar asam lemak bebas 0,17% dan memiliki nilai uji organoleptik yang normal.

Kata Kunci : VCO, Enzim Fisin Kasar, Metode Enzimatis

The Effect of the Level of Addition of Crude Ficin Enzymes on the Characteristics of Virgin Coconut Oil (VCO)

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ABSTRACT

Virgin coconut oil (VCO) is oil obtained from fresh old coconut meat and processed at low temperatures or without heating. VCO can be obtained through enzymatic processes, one of which is using the enzyme ficin. Ficin enzymes include proteolytic enzymes found in the leaves, fruit, stems and sap of fig plants (*Ficus sp.*). This research aims to determine the effect of the addition of crude ficin enzymes on the characteristics of virgin coconut oil (VCO). This research used a completely randomized design with 5 treatments and 3 replications. The research data were analyzed statistically using ANOVA and continued with the Duncan 'New Multiple Range Test (DNMRT) at the 5% level. The treatment in this study was without adding crude ficin enzymes (treatment A), addition of crude ficin enzymes at the level of 0.02% (treatment B), 0.04% (treatment C), 0.06% (treatment D), 0.08. % (treatment E). The results showed the level of addition of crude ficin enzyme to the characteristics of virgin coconut oil (VCO) had a significant effect on yield, moisture content, iodine number, organoleptic test on the level of preference for aroma and color. However, there was no significant effect on free fatty acid levels, peroxide numbers and organoleptic tests on the level of taste preference. In this research, the highest yield was obtained from treatment C with a value of 26.73%, the iodine number is 9.30 g iodine/100g, the moisture content is 0.0394%, the free fatty acid is 0.17% and has a normal organoleptic test value.

Keywords: VCO, Crude Ficin Enzyme, Enzymatic Method