

## ABSTRAK

Minyak kelapa merupakan salah satu produk olahan dari daging kelapa tua yang berupa cairan berwarna jernih, dengan bau khas kelapa. Tujuan dari penelitian ini untuk mengetahui pengaruh lama ekstraksi dan konsentrasi ragi tempe terhadap rendemen dan mutu produk. Terdapat 3 perlakuan pada penelitian yaitu lama ekstraksi (5 menit, 10 menit dan 15 menit) dan konsentrasi ragi tempe (1%, 3% dan 5%) dengan 3 kali ulangan sehingga didapatkan 27 unit percobaan. Analisa data rendemen dan fisikokimia menggunakan ANOVA dan diuji lanjut dengan Duncan, uji sensoris diuji dengan Friedman. Parameter uji yang diamati yaitu rendemen, peroksida, FFA, kadar air, viskositas dan (*Total Suspended Solids*) TSS. Hasil penelitian menunjukkan lama ekstraksi 15 menit dan 1 % ragi tempe menghasilkan rendemen tertinggi 17,76% dengan karakteristik minyak kelapa yaitu peroksida 1 meq/kg, FFA 0,12%, kadar air 0,16%, viskositas 47,70 mPa.s, TSS 0,2%. Sifat organoleptik minyak kelapa yang dihasilkan memiliki warna minyak putih sedikit kekuningan, beraroma khas kelapa, dan disukai oleh panelis. Hasil uji GC-MS profil asam lemak minyak kelapa terpilih yaitu lama ekstraksi 15 menit dan 1% ragi tempe adalah asam kaproat (0,50%), asam kaprilat (8,42%), asam dekanat (7,53%), asam laurat (39,01%), asam miristat (18,83%), asam palmitat (10,70%), asam oleat (11,99%), asam linoleat (2,76%), asam gondoat (0,13%) dan asam pentadekanoat (0,14%)

**Kata Kunci :** Minyak kelapa, lama ekstraksi, ragi tempe, rendemen, mutu minyak kelapa

## ***Abstract***

*Coconut oil is a product processed from old coconut meat in the form of a clear colored liquid, with a distinctive coconut smell. The aim of this research was to determine the effect of extraction time and tempeh yeast concentration on the yield and product quality. There were 3 treatments in this study, namely extraction time (5 minutes, 10 minutes and 15 minutes) and tempeh yeast concentration (1%, 3% and 5%) with 3 repetitions to obtain 27 experimental units. Analysis of yield and physicochemical data used ANOVA and further tested with Duncan, sensory tests were tested with Friedman. The test parameters observed were yield, peroxide, FFA (free fatty acids) water content, viscosity and (Total Suspended Solids) TSS. The results of the research showed that the extraction time was 15 minutes and 1% tempeh yeast produced the highest yield of 17.76% with the characteristics of coconut oil, namely peroxide 1 meq/kg, FFA 0.12%, water content 0.16%, viscosity 47.70 mPa.s, TSS 0.2%. The organoleptic properties of the coconut oil produced have a white, slightly yellowish oil color, a distinctive coconut aroma, and are liked by the panelists. The results of the GC-MS test for the fatty acid profile of selected coconut oil with an extraction time of 15 minutes and 1% tempe yeast were caproic acid (0.50%), caprylic acid (8.42%), decanoic acid (7.53%), lauric acid (39.01%), myristic acid (18.83%), palmitic acid (10.70%), oleic acid (11.99%), linoleic acid (2.76%), gondoic acid (0.13%) and pentadecanoic acid (0.14%)*

**Keywords:** *Coconut Oil, Extraction Time, Tempeh Yeast, Yield, Oil Quality*

