ABSTRAK

RIKO ADITIYA. Optimasi Pembuatan *Virgin Coconut Oil* (VCO) dengan Penambahan Ragi Roti (*Saccharomyces cerevisiae*) dan Lama Fermentasi dengan VCO Pancingan, dibimbing oleh Herla Rusmarilin dan Lasma Nora Limbong.

Penelitian ini dilakukan untuk mengetahui pengaruh penambahan ragi roti (*Saccharomyces cerevisiae*) dan lama fermentasi terhadap mutu *virgin coconut oil*. Penelitian ini menggunakan rancangan acak lengkap faktorial 2 faktor yaitu penambahan ragi roti (*Saccharomyces cerevisiae*) (R) : (0,1%, 0,2%, 0,3%, dan 0,4%) dan lama fermentasi (L) : (2 jam, 3 jam, dan 4 jam). Parameter yang dianalisa adalah rendemen, kadar air, asam lemak bebas, bilangan peroksida, dan bilangan penyabunan.

Hasil penelitian menunjukkan bahwa penambahan ragi roti (*Saccharomyces cerevisiae*) memberikan pengaruh berbeda sangat nyata terhadap rendemen, kadar air, asam lemak bebas, bilangan peroksida, dan bilangan penyabunan. Lama fermentasi memberikan pengaruh berbeda sangat nyata terhadap rendemen, kadar air, asam lemak bebas, bilangan peroksida, dan bilangan penyabunan. Interaksi kedua faktor memberikan pengaruh berbeda sangat nyata terhadap kadar air dan bilangan peroksida. Penambahan ragi roti (*Saccharomyces cerevisiae*) 0,1% dan lama fermentasi 2 jam menghasilkan *virgin coconut oil* yang terbaik.

Kata Kunci : *Virgin coconut oil*, ragi roti (*Saccharomyces cerevisiae*), lama fermentasi

ABSTRACT

RIKO ADITIYA. Optimization of the Making of Virgin Coconut Oil (VCO) with the Addition of Baker Yeast (Saccharomyces cerevisiae) and Fermentation Time with VCO Inducement, supervised by Herla Rusmarilin and Lasma Nora Limbong.

The aim of this research was to find the effect of the addition of baker yeast (Saccharomyces cerevisiae) and fermentation time on the quality of virgin coconut oil. This research was using completely randomized design with two factors, i.e. : the addition of baker yeast (Saccharomyces cerevisiae) (R) : (0,1%, 0,2%, 0,3%, and 0,4%) and fermentation time (L) : (2 hours, 3 hours, and 4 hours). The parameters analyzed were yield, moisture content, free fatty acid, peroxide, and saponification number.

The results showed that the addition of baker yeast (Saccharomyces cerevisiae) had highly significant effect on yield, moisture content, free fatty acid, peroxide, and saponification number. Fermentation time had highly significant effect on yield, moisture content, free fatty acid, peroxide, and saponification number. Interaction of the two factors had highly significant effect on moisture content and peroxide. The addition of baker yeast (Saccharomyces cerevisiae) of 0,1% and fermentation time of 2 hours produced the best virgin coconut oil.

Keywords : Virgin coconut oil, baker yeast (Saccharomyces cerevisiae), fermentation time