PENGARUH SUHU EKSTRAKSI ULANG GAMBIR TERHADAP KARAKTERISTIK PASTA GIGI BERBASIS *VIRGIN COCONUT OIL* (VCO)

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Pengaruh Suhu Ekstraksi Ulang Gambir Terhadap Karakteristik Pasta Gigi Berbasis *Virgin Coconut Oil* (VCO)

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh suhu ulang ekstraksi gambir terhadap karakteristik pasta gigi dan perlakuan terbaiknya. Rancangan percobaan yang digunakan pada penelitian ini adalah Rancangan Acak Lengkap (RAL) dengan lima perlakuan dan tiga ulangan. Data yang diperoleh kemudian dianalisis dengan ANOVA dan jika berbeda nyata dilanjutkan dengan uji Duncan's New Multiple Range Test (DNMRT) pada taraf 5%. Perlakuan pada penelitian ini adalah suhu ekstraksi ulang gambir, yaitu A (tanpa ekstraksi ulang gambir), B (ekstraksi ulang gambir suhu 20ºC), C (ekstraksi ulang gambir suhu 40ºC), D (ekstraksi ulang gambir suhu 60ºC), E (ekstraksi ulang gambir suhu 80ºC). Berdasarkan hasil analisis fisik, kimia, sensori, dan antibakteri, perlakuan terbaik diperoleh pada perlakuan B yaitu pasta gigi dengan ekstraksi ulang gambir suhu 20ºC. Diperoleh pasta gigi yang homogen dengan nilai pH 7,97; tinggi busa sebesar 11 mm; aktivitas antibakteri 30,83 mm; dan penilaian sensori terhadap kelembutan 4,32 (lembut), homogenitas 4,48 (homogen), serta gumpalan 4,64 (tidak ada gumpalan).

Kata kunci**: suhu ekstraksi ulang, gambir, pasta gigi, antibakteri**

Effect of Gambier Re-extraction Temperature on the Characteristics of Virgin Coconut Oil (VCO) Based Toothpaste

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ABSTRACT

This study ed to determine the effect of gambier extraction re-temperature on toothpaste characteristics and the best treatment. The experimental design used in this study was a completely randomized design (CRD) with five treatments and three replicates. The data obtained were then analyzed by ANOVA and if significantly different followed by Duncan's New Multiple Range Test (DNMRT) at the 5% level. The treatment in this study is gambier re-extraction temperature, namely A (without re-extraction of gambier), B (re-extraction of gambier at 20ºC), C (re-extraction of gambier at 40ºC), D (re-extraction of gambier at 60ºC), E (re-extraction of gambier at 80ºC). Based on the results of physical, chemical, sensory, and antibacterial analysis, the best treatment was obtained in treatment B, namely toothpaste with re-extraction of gambier at 20ºC. Homogeneous toothpaste was obtained with a pH value of 7.97; foam height of 11 mm; antibacterial activity of 30.83 mm; and sensory assessment of softness 4.32 (soft), homogeneity 4.48 (homogeneous), and lumps 4.64 (no lumps).

Keywords: **re-extraction temperature, gambier, toothpaste, antibacterial**