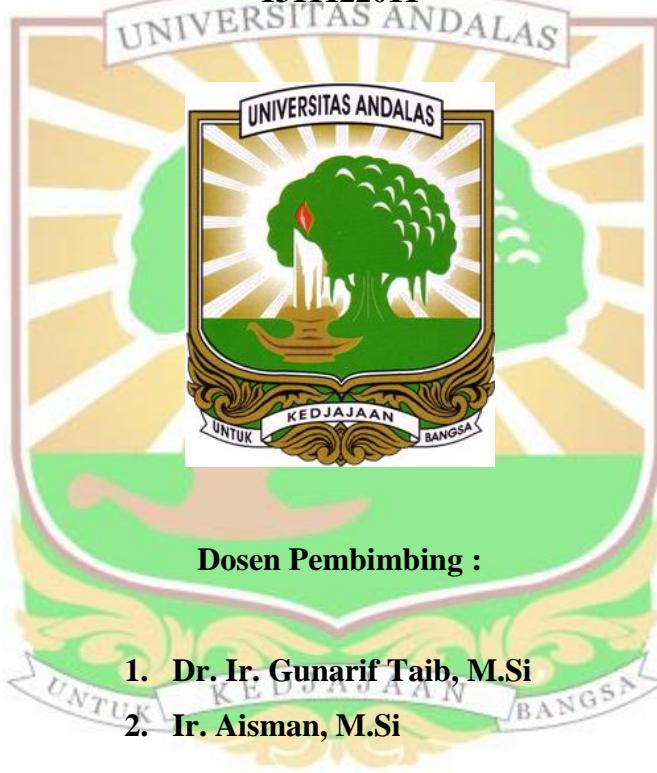


**“ANALISIS SIFAT FISIKO KIMIA LEMAK KAKAO VARIETAS BL 50 DI  
BEBERAPA DAERAH DI SUMATERA BARAT”**

**OLEH :**

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**PROGRAM STUDI TEKNOLOGI HASIL PERTANIAN  
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2020**

# **Analisis Sifat Fisiko Kimia Lemak Kakao Varietas BL 50 di Beberapa Daerah di Sumatera Barat**

Inne Nadiar Nurfadhillah, Gunarif Taib, Aisman

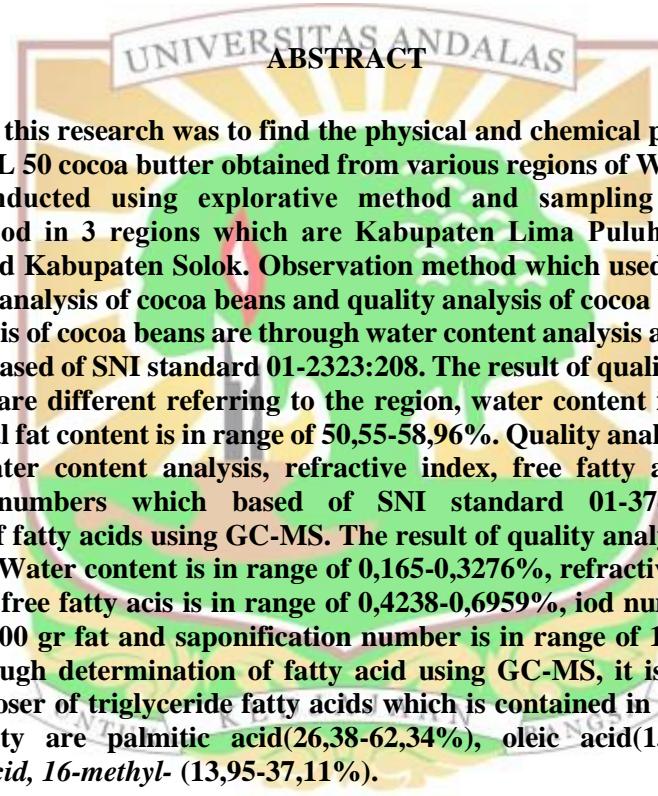
## **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui sifat fisiko kimia dan profil asam lemak dari lemak kakao varietas BL 50 dari beberapa kabupaten di Sumatera Barat. Penelitian ini dilakukan menggunakan metode quasi eksperimen dan pengambilan sampel dengan metode *purposive sampling* di tiga Kabupaten yaitu Kabupaten Lima Puluh Kota, Kabupaten Tanah Datar dan Kabupaten Solok. Pengamatan yang dilakukan berupa analisa mutu biji kakao dan analisa mutu lemak kakao. Analisa mutu biji kakao berupa analisis kadar air dan analisis kadar lemak total yang berdasarkan standar SNI 01-2323:2008. Hasil analisa mutu biji kakao yang didapatkan berbeda-beda tiap daerah, kadar air berkisar antara 5,39-6,6% dan kadar lemak total 50,55-58,96%. Analisa mutu lemak kakao berupa analisis kadar air, indeks bias, asam lemak bebas, bilangan iod, bilangan penyabunan yang berdasarkan standar SNI 01-3748:2009 dan penentuan asam lemak dengan GC-MS. Hasil analisa mutu lemak kakao juga bervariasi. Kadar air berkisar antara 0,165-0,3276%, indeks bias 1,4615-1,463, asam lemak bebas 0,4238-0,6959%, bilangan iod 23,5-32,1 gr I<sub>2</sub>/100 gr lemak dan bilangan penyabunan 189,431-192,856 mg KOH/g lemak. Penentuan asam lemak dengan GC-MS didapatkan hasil asam lemak penyusun trigliserida dominan yang terdapat pada lemak kakao varietas BL 50 adalah asam palmitat (26,38-62,34%), asam oleat (15,12-34,94%) dan *heptadecanoic acid, 16-methyl-* (13,95-37,11%).

Kata kunci : kakao BL 50, lemak kakao, asam lemak, mutu, GC-MS

# **Analysis of Physical and Chemical Properties of Cocoa Butter from BL 50 Cocoa Variety Obtained from Various Regions in West Sumatera**

Inne Nadiar Nurfachillah, Gunarif Taib, Aisman



The objective of this research was to find the physical and chemical properties and fatty acid profile of BL 50 cocoa butter obtained from various regions of West Sumatera. This research is conducted using explorative method and sampling using “purposive sampling” method in 3 regions which are Kabupaten Lima Puluh Kota, Kabupaten Tanah Datar and Kabupaten Solok. Observation method which used in this research is through quality analysis of cocoa beans and quality analysis of cocoa butter. The process of quality analysis of cocoa beans are through water content analysis and total fat content analysis which based of SNI standard 01-2323:208. The result of quality analysis of cocoa beans obtained are different referring to the region, water content is in range of 5,39-6,6% and of total fat content is in range of 50,55-58,96%. Quality analysis of cocoa butter are through water content analysis, refractive index, free fatty acids, iod number, saponification numbers which based of SNI standard 01-3748:2009, and the determination of fatty acids using GC-MS. The result of quality analysis of cocoa butter are also varied. Water content is in range of 0,165-0,3276%, refractive index is in range of 1,4615-1,463, free fatty acids is in range of 0,4238-0,6959%, iod number is in range of 23,5-32,1 gr I<sub>2</sub>/100 gr fat and saponification number is in range of 189,431-192,856 mg KOH/g fat. Through determination of fatty acid using GC-MS, it is obtained that the dominant composer of triglyceride fatty acids which is contained in cocoa butter of BL 50 cocoa variety are palmitic acid(26,38-62,34%), oleic acid(15,12-34,94%), and heptadecanoic acid, 16-methyl- (13,95-37,11%).

**Keywords :** BL 50 cocoa, cocoa butter, fatty acid, quality, GC-MS