

## ABSTRACT

**Erna Rostika. B.1410647.** The physicochemical characteristics of cocoa beans (*Theobroma cacao L.*) for chocolate products from several production centers of West Sumatra and South Sulawesi. Under Immediate Supervision of Noli Novidahlia, Tiana Fitrilia and Elsera Br Tarigan.

The quality of cocoa in Indonesia is still low, so that it is unable to compete in foreign markets. This study aims to determine the physical and chemical characteristics of cocoa beans produced from each of the 9 farmer regions to be processed into chocolate products and get consumer preference for chocolate from one of the production centers of West Sumatra and South Sulawesi cocoa bean producers (*Theobroma cacao L.*). The factors of this study are the West Sumatra cocoa beans producing region (A1 = SB<sub>1</sub> farmers), (A2 = SB<sub>2</sub> farmers), (A3 = SB<sub>3</sub> farmers), (A4 = SB<sub>4</sub> farmers), (A5 = SB<sub>5</sub> farmers), (A6 = SB<sub>6</sub> farmers), (A7 = SB<sub>7</sub> farmers), (A8 = SB<sub>8</sub> farmers), (A9 = SB<sub>9</sub> farmers), and South Sulawesi with treatment (B1 = SS<sub>1</sub> farmers), (B2 = SS<sub>2</sub> farmers), (B3 = SS<sub>3</sub> farmers), (B4 = SS<sub>4</sub> farmer), (B5 = SS<sub>5</sub> farmer), (B6 = SS<sub>6</sub> farmer), (B7 = SS<sub>7</sub> farmer), (B8 = SS<sub>8</sub> farmer), (B9 = SS<sub>9</sub> farmer). The results showed that the best quality from the area of West Sumatra was cocoa beans produced from SB<sub>1</sub> and South Sulawesi farmers from SS<sub>1</sub> farmers who were processed into chocolate. Judging from the physical test of cocoa beans these two regions have seed levels <85 the number of seeds in 100 grams with the criteria AA and quality I based on the overall results of physical tests. The cocoa beans produced by SB<sub>1</sub> farmers have a content of 3,05% moisture content, 36,56% fat content and 732,51 mg GAE/g polyphenols, while the cocoa beans produced by SS<sub>1</sub> farmers have a moisture content of 4,45%, fat content 44,29%, polyphenols 802,00 mg GAE/g. Panelists' preference for West Sumatra and South Sulawesi chocolates was not significantly different, but panelists preferred the West Sumatra chocolate. The cocoa beans produced in this study as a whole are in accordance with predetermined standards because they are fermented.

Keywords: chocolate, cocoa beans, physicochemistry, production centers.

## ABSTRAK

**Erna Rostika. B.1410647.** Karakteristik Fisikokimia Biji Kakao (*Theobroma cacao L.*) untuk Produk Cokelat dari Beberapa Sentra Produksi Sumatera Barat dan Sulawesi Selatan. Dibimbing oleh Noli Novidahlia, Tiana Fitrilia dan Elsera Br Tarigan.

Mutu kakao di Indonesia sampai saat ini masih rendah, sehingga kurang mampu untuk bersaing di pasaran luar negeri. Penelitian ini bertujuan untuk mengetahui karakteristik fisik dan kimia biji kakao yang dihasilkan dari masing-masing daerah 9 petani untuk diolah menjadi produk cokelat dan Mendapatkan preferensi konsumen terhadap cokelat dari salah satu daerah sentra produksi penghasil biji kakao (*Theobroma cacao L.*) di Sumatera Barat dan Sulawesi Selatan. Faktor dari penelitian ini yaitu daerah penghasil biji kakao Sumatera Barat dengan perlakuan (A1= petani SB<sub>1</sub>), (A2= petani SB<sub>2</sub>), (A3= petani SB<sub>3</sub>), (A4= petani SB<sub>4</sub>), (A5= petani SB<sub>5</sub>), (A6= petani SB<sub>6</sub>), (A7= petani SB<sub>7</sub>), (A8= petani SB<sub>8</sub>), (A9= petani SB<sub>9</sub>), dan Sulawesi Selatan dengan perlakuan (B1= petani SS<sub>1</sub>), (B2= petani SS<sub>2</sub>), (B3= petani SS<sub>3</sub>), (B4= petani SS<sub>4</sub>), (B5= petani SS<sub>5</sub>), (B6= petani SS<sub>6</sub>), (B7= petani SS<sub>7</sub>), (B8= petani SS<sub>8</sub>), (B9= petani SS<sub>9</sub>). Hasil penelitian menunjukkan bahwa mutu terbaik dari daerah Sumatera Barat adalah biji kakao yang dihasilkan dari petani SB<sub>1</sub> dan Sulawesi Selatan dari petani SS<sub>1</sub> yang diolah menjadi cokelat. Dilihat dari uji fisik biji kakao dua daerah ini memiliki kadar biji <85 jumlah biji dalam 100 gram dengan kriteria AA dan bermutu I berdasarkan keseluruhan hasil uji fisik. Biji kakao yang dihasilkan dari petani SB<sub>1</sub> memiliki kandungan kadar air 3,05%, Kadar Lemak 36,56% dan polifenol 732,51 mg GAE/g, sedangkan biji kakao yang dihasilkan dari petani SS<sub>1</sub> memiliki kadar air 4,45%, kadar lemak 44,29%, polifenol 802,00 mg GAE/g. Preferensi panelis terhadap cokelat Sumatera Barat dan Sulawesi Selatan tidak berbeda nyata, namun panelis lebih menyukai cokelat daerah Sumatera Barat. Biji kakao yang dihasilkan dari penelitian ini secara keseluruhan sesuai standar yang telah ditentukan karena biji kakao dilakukan fermentasi.

Kata kunci : biji kakao, cokelat, fisikokimia, sentra produksi.