

KAJIAN KARAKTERISTIK FISIK COKELAT HITAM (*DARK CHOCOLATE*), COKELAT SUSU (*MILK CHOCOLATE*), DAN COKELAT PUTIH (*WHITE CHOCOLATE*) PRALINE COMPOUND DENGAN *FILLING* (ISIAN) SELAI KACANG DAN SELAI STROBERI

INTISARI

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Cokelat merupakan suatu hasil olahan pangan konveksioner berbahan dasar biji tanaman kakao (*Theobroma cacao*). Salah satu bentuk olahan cokelat adalah cokelat *praline*. Cokelat *praline* merupakan cokelat yang di dalamnya terdapat isian, seperti selai, kacang-kacangan, atau buah-buahan. Pada penelitian ini, cokelat *praline* berasal dari tiga jenis cokelat *compound*, yaitu cokelat hitam, cokelat susu, dan cokelat putih. Tujuan dari penelitian ini adalah untuk mengkaji karakteristik sifat fisik dari cokelat hitam, cokelat susu, dan cokelat *praline compound* dengan isian selai stroberi dan selai kacang. Terdapat tiga variabel yang digunakan dalam penelitian ini, yaitu jenis selai (selai kacang dan selai stroberi), persentase penambahan bubuk kakao (10%, 20%, dan 30%), serta waktu pembentukan kristal (hari ke 0, 4, 8, dan 12). Sifat fisik yang akan diuji pada cokelat *praline compound* ini meliputi kadar air, ukuran partikel, warna (L^* , a^* , b^* , *hue*, dan *chroma*), nilai kekerasan (tekstur), serta titik leleh. Pengujian kelima karakteristik sifat fisik tersebut dilakukan selama 12 hari dengan pengambilan data setiap empat hari sekali (hari ke 0, 4, 8, dan 12). Hasil penelitian menunjukkan bahwa jenis selai yang digunakan (selai kacang dan selai stroberi) serta persentase penambahan bubuk kakao (sebesar 10%, 20% dan 30%) dalam pengolahan cokelat *praline compound* berpengaruh nyata ($p < 0,05$) terhadap kadar air, ukuran partikel, kekerasan (tekstur), warna, dan titik leleh cokelat. Kadar air cokelat cenderung meningkat dengan kisaran nilai sebesar 0,54-7,54% (wb), ukuran partikel cenderung meningkat dengan kisaran diameter sebesar 8,35-59,51 μm , kekerasan cokelat memiliki kisaran nilai sebesar 2,93-21,84 N/mm^2 , titik leleh cokelat meningkat pada temperatur 34,7-36,5°C. Nilai *lightness* (L^*) memiliki kecenderungan yang lebih besar pada kadar lemak yang rendah, sedangkan atribut warna lainnya (a^* , b^* , *hue*, *chroma*) memiliki kecenderungan nilai yang fluktuatif. Lama penyimpanan (pembentukan kristal) produk cokelat *praline compound* berpengaruh nyata ($p < 0,05$) terhadap peningkatan nilai kekerasan, ukuran partikel, titik leleh, dan atribut warna (L , a^* , b^* , *hue*, dan *chroma*) cokelat *praline compound*. Cokelat putih dengan tambahan 10% bubuk kakao dengan isian selai kacang menunjukkan hasil terbaik di antara semua sampel.

Kata kunci: cokelat, cokelat *praline*, cokelat *compound*, selai kacang, selai stroberi, sifat fisik

STUDY OF PHYSICAL CHARACTERISTICS OF DARK CHOCOLATE, MILK CHOCOLATE, AND WHITE CHOCOLATE PRALINE COMPOUND WITH STRAWBERRY JAM AND PEANUT BUTTER FILLING

ABSTRACT

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Chocolate is a confectionery food product made from cocoa beans (*Theobroma cacao L.*). One form of processed chocolate is chocolate praline. Praline chocolate is chocolate that contains a filling, such as jam, nuts, or fruit. In this study, praline chocolate came from three types of compound chocolate, i.e. dark chocolate, milk chocolate, and white chocolate. The purpose of this study was to examine the physical characteristics of dark chocolate, milk chocolate, and praline compound chocolate with strawberry jam and peanut butter filling. There are three variables used in this study. Those variables were type of jam (peanut butter and strawberry jam), the percentage of addition of cocoa powder (10%, 2%, and 30%), as well as the time of crystal formation (days 0, 4, 8, and 12). The physical properties to be tested on this praline chocolate compound include moisture content, particle size, color (L^* , a^* , b^* , hue, and chroma), hardness value (texture), and melting point. The five physical characteristics were tested for 12 days with data collection every four days (days 0, 4, 8, and 12). The results showed that the type of jam used (peanut butter and strawberry jam) as well as the percentage of addition of cocoa powder (10%, 20% and 30%) in the processing of chocolate praline compound had a significant effect ($p < 0.05$) on the moisture content, size of the chocolate. particles, hardness (texture), color, and melting point of chocolate. The moisture content of chocolate tends to increase with a value range of 0.54-7.54% (wb), particle size tends to increase with a diameter range of 8.35-59.51 μ m, chocolate hardness has a value range of 2.93-21, 84 N/mm², the melting point of chocolate increases at a temperature of 34.7-36.5°C. The value of lightness (L^*) has a greater tendency at low fat content, while other color attributes (a^* , b^* , hue, chroma) tend to fluctuate values. The storage time (crystal formation) of praline chocolate compound products has a significant effect ($p < 0.05$) on the increase in the value of hardness, particle size, melting point, and color attributes (L , a^* , b^* , hue, and chroma) of chocolate praline compound. White chocolate with the addition of 10% cocoa powder with peanut butter filling showed the best results among all samples.

Keywords: praline chocolate, compound chocolate, peanut butter, strawberry jam, physical properties