

INTI SARI

CHIKA ARSY VARELA, 2025, ANALISIS KAFEIN DALAM MINUMAN COKELAT YANG DIJUAL DI COFFEE SHOP DI DAERAH DELANGGU KLATEN SECARA KROMATOGRAFI CAIR KINERJA TINGGI, KARYA TULIS ILMIAH, PROGRAM STUDI D-III ANALIS FARMASI DAN MAKANAN, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI.

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Minuman cokelat merupakan salah satu inovasi produk olahan dari biji cokelat yang memiliki banyak peminat. Minuman cokelat mengandung senyawa alkaloid, salah satunya adalah kafein. Kafein adalah alkaloid xantin yang berbentuk kristal putih dan berasa pahit yang bekerja sebagai obat perangsang psikoaktif dan diuretik ringan. Penelitian ini bertujuan untuk mengetahui kandungan dan kadar kafein dalam minuman cokelat yang dijual di *coffee shop* daerah Delanggu Klaten

Penelitian dilakukan dengan metode Kromatografi Cair Kinerja Tinggi (KCKT) sebagai metode kuantitatif, sedangkan Uji Warna Parry digunakan untuk analisis kualitatif. Penelitian dilakukan terhadap tiga sampel minuman cokelat dari tiga *coffee shop* yang ada di Delanggu Klaten. Ketiga sampel mendapat perlakuan yang sama.

Berdasarkan hasil analisis kualitatif Uji Warna Parry sampel minuman cokelat A,B, dan C positif mengandung kafein. Hasil analisis kuantitatif sampel minuman cokelat A, B, dan C secara berturut-turut didapatkan kadar kafein sebesar 5,24 mg/sajian; 5,51 mg/sajian; dan 5,94 mg/sajian. Kadar rata-rata kafein pada sampel dalam Standar Deviasi ($\bar{x} \pm SD$) secara berturut-turut 0,026457; 0,153079; 0,086602. Ketiga sampel minuman cokelat tersebut masih berada dalam batas aman SNI 01-7152-2006.

Kata kunci : minuman cokelat, kafein, Kromatografi Cair Kinerja Tinggi (KCKT).

ABSTRACT

CHIKA ARSY VARELA, 2025, ANALYSIS OF CAFFEINE IN CHOCOLATE BEVERAGES SOLD AT COFFEE SHOPS IN DELANGGU KLATEN USING HIGH PERFORMANCE LIQUID CHROMATOGRAPHY, SCIENTIFIC PAPER, DIPLOMA OF PHARMACEUTICAL AND FOOD ANALYSIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY.

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Chocolate beverages are one of the innovative processed products derived from cocoa beans that have gained widespread popularity. Cocoa contains alkaloid compounds, one of which is caffeine. Caffeine is a xanthine alkaloid in the form of white crystals with a bitter taste that acts as a physoactive stimulant and mild diuretic. This study aims to determine the presence and concentration of caffeine in chocolate beverages sold at coffee shop in the Delanggu area of Klaten.

The research was conducted using High-Performance Liquid Cromatography (HPLC) as the quantitative method, while the parry color test was used for qualitative analysis. The study was performed on three chocolate beverages samples from three different coffee shops in Delanggu Klataen. All three samples were subjected to the same treatment.

Based on the qualitative analysis using the parry color test, samples A, B, and C tested positive for the presence of caffeine. The results of the quantitative analysis showed that the caffeine content in samples A, B, and C were 5,24 mg/serving, 5,51 mg/serving, and 5,94 mg/serving, respectively. The mean caffeine concentrations with standar deviation ($\bar{x} \pm SD$) were 0,026457; 0,153079; 0,086602, respectively. All three chocolate beverages samples were found to be within the safe limits as specified by the Indonesian National Standard (SNI) 01-7152-2006.

Keywords : chocolate beverages, caffeine, High Performance Liquid Chromatography (HPLC).