

**DEKAFEINASI KOPI KOMERSIAL VARIETAS ROBUSTA (*Coffea canephora*)
Menggunakan Sari Labu Siam (*Sechium edule*).**

**[DECAFFEINATION OF COMMERCIAL COFFEE VARIETY ROBUSTA (*Coffea canephora*)
USING CHAYOTE (*Sechium edule*) JUICE]**

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ABSTRACT

The purpose of this study was to reduce the caffeine content in coffee robusta and to find out the best concentration of chayote juice to produce low caffeine coffee. This study used Block Randomized Design (BRD), with one factor with six treatments and three replications. The treatment in this study were L0 (without the addition of chayote juice), L1 (1%), L2 (2%), L3 (3%), L4 (4%), and L5 (5%). The parameters observed were the caffeine content, protein content, titration acids total content, brightness, taste and flavour. The data were tested by analysis of variance at 5% level using the Co-Stat software followed by Duncan's Multiple Range Test at 5% level too. The results of this study showed that the concentration of chayote juice used for soaking solution significantly affected the caffeine content, protein content, titration acids total content, and the taste (scoring test). However, it did not give significantly different on the brightness, taste (hedonic test) and flavour (scoring and hedonic test). The best treatment was 3% chayote juice which produced coffee with the following characteristics: caffeine content 0.24%, protein content 14.27%, titration acids total content 2.85%, brightness 44.34, slightly strong flavour which slightly liked by the panelists and bitter taste which slightly liked by the panelists.

Keywords: Decaffeination, robusta coffee, chayote.

ABSTRAK

Tujuan dari penelitian ini untuk menurunkan kadar kafein pada biji kopi robusta (*Coffea canephora*) dan mengetahui konsentrasi terbaik sari labu siam (*Sechium edule*) untuk menghasilkan kopi rendah kafein. Rancangan yang digunakan adalah Rancangan Acak Kelompok (RAK) satu faktor dengan enam perlakuan diulang sebanyak tiga kali. Perlakuan terdiri atas L0, L1, L2, L3, L4, dan L5 dengan konsentrasi berturut-turut 0%, 1%, 2%, 3%, 4%, dan 5%. Parameter yang diamati yaitu Kadar Kafein, Kadar Protein, Kadar Total Asam Titrasi, Warna, Rasa dan Aroma. Data hasil pengamatan dianalisis menggunakan analisis keragaman pada taraf nyata 5% menggunakan Co-Stat. Data yang berbeda nyata diuji lanjut dengan *Duncan Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa konsentrasi sari labu siam yang digunakan sebagai bahan perendam berpengaruh nyata terhadap kadar kafein, kadar protein, kadar total asam titrasi, dan rasa (uji skoring), namun tidak berpengaruh nyata terhadap warna (Tingkat Kecerahan), rasa (uji hedonik), dan aroma (uji skoring dan hedonik). Perlakuan terbaik yaitu 3% sari labu siam yang menghasilkan kopi dengan karakteristik sebagai berikut kadar kafein 0.24%, kadar protein 14.27%, kadar total asam titrasi 2.85%, warna 44,34, aroma kopi agak kuat yang agak disukai panelis dan rasa kopi pahit yang agak disukai panelis.

Kata kunci: Dekafeinasi, kopi robusta, labu siam.