

**DEKAFEINASI GREEN BEAN KOPI ROBUSTA (*Coffea canephora*) AREA GEOPARK RINJANI LOMBOK
MENGUNAKAN BUAH NANAS (*Ananas comocus*)**

(DECAFFEINATION OF GEOPARK RINJANI LOMBOK AREA GREEN BEAN ROBUSTA COFFEE (*Coffea canephora*) USING PINEAPPLES (*Ananas comocus*))

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ABSTRACT

*The purpose of this study was to reduce the caffeine content of robusta coffee (*Coffea canephora*) and to find out the optimum concentration of pineapple (*Ananas comocus*) from the 36 hours soaking treatment. The experimental design used in this study was one-factor Randomized Complete Block Design (RCBD) with six treatments and each treatment was repeated three times. The treatment consisted of L0 (control or robusta coffee beans without decaffeination), L1 (pineapple fruit concentration : 0%), L2 (pineapple fruit concentration : 20%), L3 (pineapple fruit concentration : 40%), L4 (pineapple fruit concentration : 60%) and L5 (pineapple fruit concentration : 80%). Parameters observed were the caffeine content, the total titrated acid content, the water content, the ash content, the organoleptic characteristics (taste and aroma) using scoring and hedonic test. Data obtained from the observation were tested with the analysis of variance at the 5% significance level using Co-Stat software. When there were significantly different they were further tested using the Duncan Multiple Range Test (DMRT) at 5% significance level. The results showed that the soaking treatment using pineapple had significantly different effect on the caffeine content, protein content, ash content, taste (scoring scale) and aroma (scoring and hedonic scale), but did not give significantly different effect on the total titrated acid content and taste (hedonic scale). The best treatment was the addition of 40% concentration of pineapple fruit which produced coffee with the characteristics of 1,22% caffeine content, 12,86% protein content, 0,76% total titrated acid content, 3,56% ash content, the coffee flavor was rather bitter and slightly preferred by the panelists, and the coffee aroma was strong and preferred by the panelists.*

Keywords : decaffeination, pineapple, robusta coffee.

ABSTRAK

Penelitian ini bertujuan untuk menurunkan kadar kafein pada biji kopi robusta (*Coffea canephora*) dan mengetahui konsentrasi terbaik dari perlakuan perendaman buah nanas (*Ananas comocus*) selama 36 jam. Rancangan yang digunakan dalam penelitian ini adalah Rancangan Acak Kelompok (RAK) satu faktor dengan enam perlakuan yang diulang sebanyak tiga kali. Perlakuan terdiri atas L0 (kontrol atau biji kopi robusta tanpa dekafeinasi); L1 (konsentrasi buah nanas: 0%); L2 (konsentrasi buah nanas: 20%); L3 (konsentrasi buah nanas: 40%); L4 (konsentrasi buah nanas: 60%); dan L5 (konsentrasi buah nanas: 80%). Parameter yang diamati yaitu kadar kafein, kadar protein, kadar total asam tertitrasi, kadar air, kadar abu, karakteristik organoleptik (rasa dan aroma) menggunakan uji hedonik dan skoring. Data hasil pengamatan diuji dengan analisis keragaman pada taraf nyata 5% menggunakan *software* Co-Stat. Data pengamatan yang berbeda nyata akan diuji lanjut menggunakan uji *Duncan Multiple Range Test* (DMRT) pada taraf nyata 5%. Hasil penelitian menunjukkan bahwa perendaman menggunakan buah nanas memberikan pengaruh berbeda nyata terhadap kadar kafein, kadar protein, kadar abu, rasa (skala skoring) dan aroma (skala skoring dan hedonik), namun tidak memberikan pengaruh berbeda nyata terhadap kadar total asam tertitrasi, kadar air dan rasa (skala hedonik). Perlakuan terbaik adalah penambahan konsentrasi buah nanas 40% dengan karakteristik kadar kafein 1.22%, kadar protein 12.86%, kadar total asam tertitrasi 0.76%, kadar air 9,21%, kadar abu 3,56%, rasa kopi agak pahit dan agak disukai oleh panelis, serta aroma kopi kuat dan disukai oleh panelis.

Kata kunci : dekafeinasi, kopi robusta, nanas.