

**PENGARUH LAMA PERENDAMAN KOPI ROBUSTA ARGOPURO
(*Coffea canephora* L.) DALAM SARI LABU SIAM TERHADAP
KARAKTERISTIK FISIKOKIMIA *GREEN BEAN***

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ABSTRAK

Kopi merupakan salah satu komoditas perkebunan unggulan Indonesia yang memiliki kandungan kafein cukup tinggi sehingga dapat menimbulkan efek samping bagi sebagian konsumen. Salah satu upaya untuk menurunkan kandungan kafein adalah melalui proses dekafeinasi menggunakan bahan alami, salah satunya sari labu siam yang mengandung enzim dan senyawa bioaktif. Penelitian ini bertujuan untuk mengetahui pengaruh lama perendaman kopi Robusta Argopuro dalam sari labu siam terhadap karakteristik fisikokimia *green bean* serta menentukan lama perendaman terbaik. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan empat perlakuan, yaitu kontrol (tanpa perendaman), perendaman selama 24 jam, 48 jam, dan 72 jam, masing-masing diulang empat kali sehingga diperoleh 16 satuan percobaan. Parameter yang diamati meliputi warna, rendemen, densitas, kadar air, kadar abu, dan kadar kafein. Data dianalisis menggunakan analisis ragam (ANOVA), kemudian dilanjutkan dengan uji BNT pada taraf 5% apabila terdapat pengaruh nyata. Hasil penelitian menunjukkan bahwa lama perendaman berpengaruh nyata terhadap karakteristik fisik dan kimia *green bean*. Perendaman menyebabkan warna *green bean* menjadi lebih kecokelatan, menurunkan nilai rendemen, serta meningkatkan densitas dibandingkan kontrol. Selain itu, lama perendaman juga memengaruhi kadar air, kadar abu, dan kadar kafein. Perlakuan perendaman selama 24 jam menghasilkan karakteristik terbaik karena mampu menurunkan kadar kafein tanpa menurunkan mutu fisikokimia *green bean* secara signifikan.

Kata kunci: Dekafeinasi, Fermentasi, Fisikokimia, Kopi Robusta Argopuro, Labu Siam.

***Effect of Soaking Duration of Argopuro Robusta Coffee (Coffea canephora L.)
in Chayote Extract on the Physicochemical Characteristics of Green Beans***

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ABSTRACT

Coffee is one of Indonesia's leading plantation commodities with relatively high caffeine content, which may cause adverse effects for some consumers. One approach to reducing caffeine content is natural decaffeination using plant-based materials, such as chayote (Sechium edule) extract, which contains enzymes and bioactive compounds. This study aimed to evaluate the effect of soaking duration of Argopuro Robusta coffee in chayote extract on the physicochemical characteristics of green coffee beans and to determine the optimum soaking duration. The experiment employed a Completely Randomized Design (CRD) consisting of four treatments: control (without soaking), soaking for 24, 48, and 72 hours, with four replications, resulting in 16 experimental units. The observed parameters included color, yield, density, moisture content, ash content, and caffeine content. Data were analyzed using analysis of variance (ANOVA), followed by LSD at a 5% significance level when significant differences were observed. The results indicated that soaking duration significantly affected the physicochemical characteristics of green coffee beans. Soaking caused the beans to become browner in color, reduced yield, and increased density compared with the control treatment. In addition, soaking duration affected moisture content, ash content, and caffeine content. The 24-hour soaking treatment produced the best overall characteristics, as it reduced caffeine content while maintaining the physicochemical quality of the green coffee beans.

Keywords: *Decaffeination, Fermentation, Physicochemical, Argopuro Robusta Coffee, Chayote.*