



## **PENGARUH TINGKAT PENYANGRAIAN TERHADAP KARAKTERISTIK FISIKOKIMIA KOPI ARABIKA MANDAILING**

### **INTISARI**

**Oleh:**

**Faizah Fidah Fatinah**

Indonesia merupakan salah satu negara penghasil kopi terbesar di dunia yang memiliki beragam jenis kopi Arabika, salah satunya adalah kopi Arabika Mandailing. Proses penyangraian merupakan tahapan penting yang berperan dalam menentukan karakteristik fisikokimia kopi. Penelitian ini bertujuan untuk mengkaji pengaruh variasi tingkat penyangraian terhadap karakteristik fisikokimia kopi Arabika Mandailing. Penelitian dilakukan menggunakan kopi Arabika Mandailing dengan membandingkan kopi hijau (*green beans*) dan tiga tingkat penyangraian, yaitu *light roast* (200 °C selama 6 menit 12 detik), *medium roast* (206 °C selama 9 menit 6 detik), dan *dark roast* (223 °C selama 8 menit 28 detik). Parameter fisik yang dianalisis meliputi warna biji, warna bubuk, dan densitas kamba, sedangkan parameter proksimat dan kimia meliputi kadar air, kadar abu, kadar kafein, kadar asam klorogenat, serta total titratable acidity (TTA). Hasil penelitian menunjukkan bahwa densitas kamba dan kadar air tertinggi terdapat pada tahap *light roast*, masing-masing sebesar 0,40 g/mL dan 5,93%. Kadar abu dan kadar kafein tertinggi diperoleh pada tahap *dark roast* dengan nilai masing-masing sebesar 6,72% dan 10,22 mg/g (1,02%). Kadar asam klorogenat tertinggi ditemukan pada tahap *light roast* sebesar 18,23 mg/g, sedangkan nilai total titratable acidity tertinggi diperoleh pada tahap *light roast* sebesar 4,76 mL NaOH/40 mL sampel. Secara umum, peningkatan tingkat penyangraian menyebabkan perubahan yang signifikan terhadap karakteristik fisikokimia kopi Arabika Mandailing.

Kata kunci: karakteristik fisikokimia, kopi Mandailing, kopi Arabika, penyangraian



## **THE EFFECT OF ROASTING LEVEL ON THE PHYSICOCHEMICAL CHARACTERISTICS OF MANDAILING ARABICA COFFEE**

### **ABSTRACT**

**Oleh:**

**Faizah Fidah Fatinah**

Indonesia is one of the world's largest coffee-producing countries with a wide diversity of Arabica coffees, one of which is Mandailing Arabica coffee. Roasting is a crucial processing stage that plays an important role in determining the physicochemical characteristics of coffee. This study aimed to evaluate the effect of different roasting levels on the physicochemical characteristics of Mandailing Arabica coffee. The research was conducted using Mandailing Arabica coffee by comparing green beans with three roasting levels, namely light roast (200 °C for 6 min 12 s), medium roast (206 °C for 9 min 6 s), and dark roast (223 °C for 8 min 28 s). Physical parameters analyzed included bean color, ground coffee color, and bulk density, while proximate and chemical parameters included moisture content, ash content, caffeine content, chlorogenic acid content, and total titratable acidity (TTA). The results showed that the highest bulk density and moisture content among the roasting levels were observed in light roast coffee, with values of 0.40 g/mL and 5.93%, respectively. The highest ash content and caffeine content were obtained at the dark roast level, with values of 6.72% and 10.22 mg/g (1.02%), respectively. The highest chlorogenic acid content was found in light roast coffee at 18.23 mg/g, while the highest total titratable acidity was also observed at the light roast level, amounting to 4.76 mL NaOH/40 mL sample. Overall, increasing roasting levels caused significant changes in the physicochemical characteristics of Mandailing Arabica coffee.

**Keywords:** Mandailing coffee, physiochemical characteristics, roasting level, Arabica coffee