OPTIMALISASI PROSES SANGRAI UNTUK MENINGKATKAN KUALITAS SENSORIS DAN SIFAT FISIKOKIMIA KOPI TORAJA

INTISARI

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Indonesia, sebagai negara penghasil kopi terbesar keempat di dunia, memiliki potensi untuk mengembangkan produk kopi dengan kualitas internasional. Kopi Toraja, yang berasal dari Toraja, Sulawesi Selatan, merupakan salah satu *specialty coffee* Indonesia yang telah dikenal luas secara global. Kualitas kopi sangat dipengaruhi proses penyangraian. Penelitian ini bertujuan untuk mengoptimalisasi proses penyangraian biji kopi Toraja dengan memperhatikan suhu dan durasi penyangraian untuk menghasilkan kopi dengan kualitas optimal. Pada penelitian ini, biji kopi Toraja disangrai dengan lima tingkat sangrai berbeda, yaitu *light roast* (230°C, 12 menit), *light medium roast* (235°C, 13 menit), *medium roast* (240°C, 14 menit), *medium dark roast* (250°C, 19 menit), dan *dark roast* (250°C, 21 menit). Setelah proses penyangraian, dilakukan analisis terhadap kualitas sensoris dan sifat fisikokimia kopi Toraja. Penelitian menemukan bahwa seiring dengan meningkatnya tingkat sangrai, terjadi penurunan kadar asam klorogenat, *total titratable acidity*, densitas kamba, kadar air, nilai kuantitatif warna, dan cita rasa kopi Toraja. Sebaliknya, kadar kafein dan kadar abu berbanding lurus dengan kenaikan tingkat sangrai. Kopi Toraja *light roast* merupakan tingkat sangrai terbaik dengan kadar asam klorogenat 47,60 mg/g, kadar kafein 7,40 mg/g , *total titratable acidity* 1 mL NaOH/40 mL sampel, densitas kamba 0,70 g/mL, kadar air 6,22%, kadar abu 4,10%, dan *cupping score* 84,80. *Cupping notes* yang dominan antara lain *brown sugar*, *flowery-coffee blossom-honeyed*, *lemony*, *spicy-clove*, *herbal*, *greenish*, dan *astringent-aftertaste*. Hasil penelitian ini memberikan informasi untuk menghasilkan kopi Toraja dengan kualitas sensoris dan sifat fisikokimia yang unggul.

Kata kunci: kopi *specialty*, kopi Toraja, penyangraian, kualitas sensoris, sifat fisikokimia

OPTIMIZATION OF ROASTING CONDITIONS ACCORDING TO SENSORY QUALITY AND PHYSICOCHEMICAL PROPERTIES IN TORAJA COFFEE

ABSTRACT

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Indonesia, as the fourth-largest coffee producer globally, has the potential to develop internationally recognized coffee products. Toraja coffee, which originates from Toraja, South Sulawesi, is one of Indonesia's well-known specialty coffees. The quality of coffee is greatly influenced by the roasting process. This study aims to optimize the roasting of Toraja coffee by adjusting the temperature and duration to produce Toraja coffee with optimal quality. Toraja coffee beans were roasted at five different roast levels: light roast (230°C, 12 minutes), light medium roast (235°C, 13 minutes), medium roast (240°C, 14 minutes), medium dark roast (250°C, 19 minutes), and dark roast (250°C, 21 minutes). After roasting, sensory and physicochemical analyses were conducted. The results showed that as the roast level increased, there was a decrease in chlorogenic acid, titratable acidity, bulk density, moisture content, quantitative color value, and flavor. In contrast, caffeine and ash content increased with the roast level. Light roasted Toraja coffee was the best roast level, with a chlorogenic acid content of 47.60 mg/g, caffeine content of 7.40 mg/g, total titratable acidity of 1 mL NaOH/40 mL sample, bulk density of 0.70 g/mL, moisture content of 6.22%, ash content of 4.10%, and a cupping score of 84.80. The dominant flavor notes were brown sugar, flowery, lemony, spicy, herbal, and astringent aftertaste. These findings offer valuable insights for producing Toraja coffee with outstanding sensory and physicochemical qualities.

Keywords: specialty coffee, Toraja coffee, roasting, sensory quality, physicochemical properties