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EFEK PENAMBAHAN BERAS PADA SIFAT SEDUHAN KOPI BUBUK ROBUSTA KHAS LOMBOK
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INTISARI

Penelitian ini bertujuan untuk menguji pengaruh penambahan beras putih (*Oryza sativa*) selama proses penyangraian biji kopi Robusta (*Coffea canephora*) terhadap sifat fisiko-kimia dan organoleptik, serta penentuan konsentrasi penambahan beras terbaik untuk produksi kopi khas Lombok. Pencampuran beras putih dengan kopi merupakan tradisi lokal yang telah lama ada di Lombok, yang diyakini dapat memodifikasi karakteristik rasa sekaligus mengurangi biaya produksi. Akan tetapi, proporsi penambahan beras putih yang ada di masyarakat masih sangat bervariasi dan tidak ada acuan baku. Penyangraian dilakukan pada beberapa rasio beras - kopi untuk menentukan dampaknya terhadap kadar air, pH, total padatan terlarut, warna, abu, lemak, protein, karbohidrat, kafein, asam klorogenat, dan senyawa volatil, diikuti dengan evaluasi sensorik melalui uji cupping. Penambahan beras putih pada proses penyangraian kopi khas Lombok menghasilkan perubahan yang konsisten pada karakteristik fisiko-kimia, volatil, dan sensoris. Peningkatan proporsi beras putih terbukti meningkatkan nilai warna (*L*, *a*, *b*), pH, serta karbohidrat total, namun menurunkan kadar air, total padatan terlarut, abu, protein, lemak, kafein, dan asam klorogenat. Profil senyawa volatil turut bergeser, ditunjukkan oleh meningkatnya kelompok pirazin, furan, keton, dan eter, serta menurunnya pirol dan fenol. Senyawa alkohol hanya terdeteksi pada sampel 100% robusta, sedangkan formulasi berbasis beras putih menampilkan golongan volatil khas seperti pyridine, aldehida, organosulfur, heterosiklik aromatik, indol, monoterpene, dan alkaloid. Pada aspek sensoris, penambahan beras putih memengaruhi mutu *cupping*, dengan formulasi 25% beras putih (F2) memperoleh skor tertinggi (72; kategori baik) dan karakter citarasa *chocolaty*, *brown sugar-like*, serta *cereally*, sementara formulasi 100% beras putih menunjukkan mutu terendah tanpa karakter kopi dominan. Temuan ini menunjukkan bahwa proporsi 25% beras putih memberikan kombinasi terbaik antara parameter fisiko-kimia, volatil, dan mutu sensoris pada kopi bubuk khas Lombok dalam kondisi penelitian yang diuji. Temuan ini menyoroti dasar ilmiah untuk praktik pencampuran kopi tradisional Lombok dan memberikan wawasan tentang potensi pengembangan industri minuman kopi tradisional Lombok yang unik.

Kata kunci: Robusta, Beras Putih, Penyangraian, Fisiko-kimia, Organoleptik

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ABSTRACT

This study aimed to evaluate the effect of white rice (Oryza sativa) addition during the roasting process of Robusta coffee beans (Coffea canephora) on physicochemical and organoleptic properties, as well as to determine the optimum proportion of rice addition for the production of traditional Lombok coffee. The practice of blending white rice with coffee is a long-established local tradition in Lombok, which is believed to modify flavor characteristics while reducing production costs. However, the proportion of rice addition used by local producers remains highly variable and lacks scientific standardization. Roasting proces was conducted using several coffee–rice ratios to evaluate their effects on moisture content, pH, total soluble solids, color, ash, fat, protein, carbohydrates, caffeine, chlorogenic acid, and volatile compounds. Sensory evaluation was conducted using a cupping test. The addition of white rice during roasting caused consistent changes in physicochemical, volatile, and sensory characteristics of Lombok coffee. Increasing the proportion of rice increased color values (L, a*, b*), pH, and total carbohydrate content, while decreasing moisture content, total soluble solids, ash, protein, fat, caffeine, and chlorogenic acid levels. Changes in the volatile profile were observed, with increased levels of pyrazines, furans, ketones, and ethers and decreased levels of pyrroles and phenols. Alcohol compounds were detected only in the 100% Robusta sample, whereas rice-containing formulations showed specific volatile groups such as pyridines, aldehydes, organosulfur compounds, aromatic heterocycles, indoles, monoterpenes, and alkaloids. From a sensory perspective, white rice addition affected cupping quality. The formulation containing 25% white rice (F2) obtained the highest score (72; good category) and was characterized by chocolaty, brown sugar-like, and cereal notes. In contrast, the 100% white rice formulation showed the lowest sensory quality and lacked dominant coffee characteristics. These results indicated that a 25% white rice proportion provided the most suitable balance of physicochemical properties, volatile composition, and sensory quality for traditional Lombok ground coffee under the experimental conditions. This study provided scientific support for traditional coffee–rice blending practices in Lombok and highlighted their potential for developing a distinctive traditional coffee beverage.*

Keywords: *Robusta Coffee, White Rice, Roasting, Physico-chemical, organoleptic*