

ABSTRACT

Cascara is a product made from dried coffee cherry pulp, utilized as a brewed beverage. The drying process can influence the chemical and sensory characteristics of cascara. This study aimed to determine the effect of drying methods and durations on the chemical and sensory properties of Robusta coffee cascara and to identify the optimal treatment. A 2×3 factorial Completely Randomized Design (CRD) was employed, involving two drying methods—sun drying and food dehydrator—and three drying durations: 4, 8, and 12 hours. Drying in the food dehydrator was conducted at 50°C. Observed parameters included moisture content, pH, tannin content, antioxidant activity, caffeine content, browning index, hedonic quality, and hedonic acceptance. Data were analyzed using ANOVA at the 5% significance level, followed by the Least Significant Difference (LSD) test. The results indicated that the drying method significantly affected moisture content, pH, antioxidant activity, browning index, and both hedonic quality and hedonic acceptance regarding color. Drying duration significantly influenced moisture content, pH, tannin content, antioxidant activity, browning index, and both hedonic quality and hedonic acceptance regarding color. The food dehydrator treatment combination at 50°C for 12 hours (A2B3) resulted in a moisture content of 3.16%, pH of 4.78, tannin content of 2.48%, caffeine content of 1.52%, browning index of 43.96, and antioxidant activity of 47.96%. Based on chemical and sensory characteristics, the best treatment was A2B3—specifically, drying using a food dehydrator at 50°C for 12 hours.

Keywords: *Robusta cascara, food dehydrator, drying duration, chemical properties, sensory properties.*