THE EFFECT OF GINGER POWDER (Zingiber officinale Var.Amarum) ON THE PHYSICOCHEMICAL AND SENSORY CHARACTERISTIC QUALITY OF ROBUSTA COFFEE (Coffea canephora L)

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ABSTRACT

This research aims to explore the effect of adding ginger powder (Zingiber officinale Var. Rubrum) on the physicochemical and sensory quality of robusta coffee (Coffea robusta). Robusta coffee, which is widely cultivated in Indonesia, has a characteristic strong and bitter taste, which can be enhanced by the addition of natural ingredients such as ginger. Ginger, which contains bioactive compounds such as gingerol and shogaol, has antioxidant and anti-inflammatory properties that can influence the physicochemical characteristics of coffee products. This research used a non-factorial Completely Randomized Design (CRD) method with four treatments and four repetitions for physicochemical analysis, and 50 panelists for sensory tests. The treatments tested included various concentrations of ginger powder in the robusta coffee mixture: P1 (96% coffee: 4% ginger), P2 (94% coffee: 6% ginger), P3 (92% coffee: 8% ginger), and P4 (90 % coffee: 10% ginger). Parameters observed included water content, pH value, caffeine content, dissolved solids (TDS) content, and organoleptic tests (aroma, taste, texture/body, aftertaste, and overall). The concentration of ginger powder affects the physiochemical quality of robusta coffee. The water content value is the highest in the P4 treatment, for the pH value the best treatment is in the P2 treatment with a value of 5.67, while for caffeine the highest value is in P4, and for the soluble solids parameter the highest result is in the P2 treatment. with a value of 1.17%. For aroma parameters, the highest value was in treatment P4, for taste, texture, overall and overall parameters, the best value was in treatment P3.

Keywords: Robusta Coffee, Emprit Ginger, Physiochemistry and Sensory