

***"Physicochemical and Organoleptic Characteristics of Argopuro Robusta Instant Coffee with the Addition of Secang Powder (Caesalpinia sappan L.) Using the Crystallization Method"***

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**ABSTRACT**

*Instant coffee is a product innovation that is not only practical and favored by consumers but also offers health benefits. Sappan wood (Caesalpinia sappan L.) has long been used in traditional beverages; however, its utilization in modern instant coffee products remains very limited. The addition of sappan wood powder to instant coffee is expected to provide high functional value while supporting the development of innovative coffee products based on Indonesian local spices. This study aimed to determine the effect of adding secang extract (Caesalpinia sappan L.) on the physicochemical and organoleptic characteristics of instant coffee produced using the crystallization method. The study employed a non-factorial Completely Randomized Design (CRD) consisting of six concentrations of sappan wood extract, namely P0 (0%), P1 (10%), P2 (20%), P3 (30%), P4 (40%), and P5 (50%). The parameters analyzed included yield, moisture content, ash content, total soluble solids (TSS), solubility, pH, and organoleptic properties (color, aroma, taste, aftertaste, and overall acceptability). Data were analyzed using ANOVA followed by Duncan's Multiple Range Test (DMRT) at a 5% significance level. The results showed that the addition of sappan wood extract had a significant effect on physicochemical characteristics such as ash content, pH, total soluble solids, and solubility, but did not significantly affect moisture content and yield. In the organoleptic evaluation, the addition of sappan wood extract significantly affected color, aroma, taste, aftertaste, and overall acceptability.*

**Keywords:** *instant coffee, secang powder (Caesalpinia sappan L.), crystallization, physicochemical, organoleptic.*