

ABSTRACT

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DEVELOPMENT OF FERMENTED COFFEE BEVERAGE USING DIFFERENT INDONESIAN ARABICA AND ROBUSTA COFFEE BEANS

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Coffee is one of the popular beverages that is consumed by Indonesian people as well as included as one of valuable commodities in the world. Indonesia is ranked as the fourth largest coffee producer and exporter in the world. However, the excess production of Indonesian coffee resulted in the lower coffee price. Fermentation is considered as one of the innovations that can be done to increase the economic value and enhance the unique flavor of Indonesian coffee. The research was conducted to determine the preferred type of Indonesian coffee and fermentation treatment that yield the best sensory properties of fermented coffee beverage. The first research stage was conducted to obtain the preferred concentration of yeast starter (5, 10, 15%) and sugar (15, 20, 25%) in the making of fermented coffee beverage. In second research stage, the preferred concentration of yeast starter and sugar was used in the production of fermented coffee beverage with different coffee origins (Flores, Toraja, Ulee Kareng, Lampung coffee) and fermentation time (7, 14, 21 days). The pH, total titratable acid, total soluble solid, alcohol content and organoleptic properties of fermented coffee beverage were analysed for each treatment. The best fermented coffee beverage was made from Flores coffee with 5% starter and 15% sugar which undergo fermentation for 7 days and had pH of 3.95 ± 0.02 , total titratable acid of 0.50 ± 0.02 %, total soluble solid of 13.9 ± 0.16 °Brix, alcohol content of 3.77 ± 0.04 %, caffeine content of 842.48 mg/L and favoured by the panelists.

Keywords : coffee, fermentation, fermented beverage, fermented coffee, Indonesian coffee

References : 74 (1996-2020)