ABSTRACT

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PRODUCTION OF KOMBUCHA MADE FROM COFFEE ROBUSTA (*Coffea canephora*) LEAVES
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(xiv + 51 pages, 6 tables, 9 figures, and 15 appendices)

Kombucha is a functional fermented beverage that is traditionally produced by fermenting sweet tea with the help of symbiotic culture of bacteria (SCOBY) and yeasts or kombucha mother tea. Hence, this research was done with the help of kombucha mother tea. This research was done to produced kombucha made from coffee Robusta (Coffea canephora) leaves to increase the potential use of its leaves in beverage products. The different fermentation time, types of sugar and tea concentrations in this research were fermentation time (7, 8, 9 days), types of sugar (sucrose, glucose and high fructose corn syrup) and tea concentrations (1, 2, 3% w/v). The aim of this research was to optimize the types of sugar, tea content and fermentation time of kombucha prepared from coffee Robusta (Coffea canephora) leaves based on the highest antioxidant activity. This was done by evaluating the chemical, physical, microbiological characteristics and the sensory results of the product. Through this research, the optimum fermentation condition was found in 9 days fermentation that used sucrose and 1% tea concentration. The results obtained were 91.68±0.18% free radical scavenging activity, 237±3.38 mg GAE/mL, 0.37±0.01% acetic acid and pH 2.722±0.008.

Keywords: Kombucha, sugar, fermentation, *Coffea canephora*
References: 47 (1989 – 2017)