

ABSTRAK

OPTIMASI KONSENTRASI MIKROBA DAN LAMA FERMENTASI MENGGUNAKAN MIKROBA GHALKOFF TERHADAP SIFAT KIMIA DAN CITA RASA BIJI KOPI ROBUSTA

Oleh

IKA PUTRI SULISTIANA

Penelitian ini bertujuan untuk mendapatkan kondisi optimum dari konsentrasi mikroba ghalkoff dan lama fermentasi yang menghasilkan sifat kimia dan citarasa kopi robusta. Penelitian ini menggunakan metode permukaan respon (Response Surface Methodology) dengan rancangan design Central Composite Design 2 faktorial, yaitu faktor pertama (C) konsentrasi starter ghalkoff 20%, 25%, 30% . Faktor kedua (T) lama fermentasi 24 jam, 48 jam, dan 72 jam. Hasil penelitian menunjukkan bahwa semakin tinggi konsentrasi mikroba, dan semakin lama waktu fermentasi menghasilkan citarasa, total mikorba kadar kafein dan asam klorogenat dengan nilai optimum. Kondisi optimum pada fermentasi kopi robusta organik yang dapat meningkatkan citarasa seperti kopi luwak yaitu pada waktu fermentasi 69 jam dan konsentrasi mikorba 30% menghasilkan cita rasa 83, kadar kafein 1,89% dan kadar asam klorogenat 5,78%.

Kata kunci: Kopi Robusta, Mikroba Ghalkoff, Fermentasi, Asam Klorogenat, Kafein

ABSTRACT

OPTIMIZATION OF MICROBIAL CONCENTRATION AND FERMENTATION LONG USING GHALKOFF MICROBIALS ON CHEMICAL PROPERTIES AND TASTE OF ROBUSTA COFFEE SEEDS

By

IKA PUTRI SULISTIANA

This study aims to obtain the optimum conditions of the concentration of ghalkoff microbes and the length of fermentation that produces the chemical properties and taste of robusta coffee. This study used the response surface method (Response Surface Methodology) with a 2 factorial Central Composite Design design, namely the first factor (C) starter ghalkoff concentration 20%, 25%, 30%. The second factor (T) was the duration of fermentation 24 hours, 48 hours, and 72 hours. The results showed that the higher the concentration of microbes, and the longer the fermentation produced the taste, the total microbial content of caffeine and chlorogenic acid was the optimum value. The optimal conditions for fermenting organic robusta coffee that can increase the taste of civet coffee are 69 hours of fermentation and 30% microbial concentration producing 83 flavors, 1.89% caffeine content and 5.78% chlorogenic acid content.

Keywords: Robusta Coffee, Ghalkoff Microbes, Fermentation, Chlorogenic Acid, Caffeine