

ABSTRAK

Talitha Sahda Fermana, NIM 4193220014 (2022). Pengaruh Penambahan Mikroba dari Minuman Probiotik dan Lama Fermentasi Terhadap Kualitas Kopi Arabika (*Coffea arabica* L.)

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan mikroba dari minuman probiotik dan lama fermentasi terhadap kualitas kopi Arabika (*Coffea arabica* L.). Penelitian ini dilaksanakan pada tanggal 27 September – 29 November 2022 di Laboratorium Terpadu Balai Penelitian Tanaman Industri dan Penyegar (Balittri) Sukabumi, Jawa Barat. Jenis Penelitian ini adalah penelitian eksperimental dengan Rancangan Acak Lengkap Faktorial. Jumlah perlakuan adalah 8 kombinasi perlakuan dan 3 ulangan. Analisis data menggunakan Analisis Varians (ANOVA) dilanjutkan dengan uji Tukey. Parameter yang diamati dalam penelitian ini adalah pH fermentasi, kadar air, kadar kafein dan cita rasa. Dari hasil penelitian diperoleh bahwa pengaruh penambahan mikroba dan lama fermentasi berpengaruh nyata terhadap pH fermentasi, kadar air, kadar kafein dan cita rasa atribut rasa. Lama waktu fermentasi berpengaruh nyata terhadap pH fermentasi, kadar air, kadar kafein dan cita rasa atribut *overall*. Terdapat pengaruh nyata interaksi penambahan mikroba dan lama waktu fermentasi terhadap kadar kafein, dan tidak terdapat pengaruh nyata interaksi penambahan mikroba dan lama waktu fermentasi terhadap pH fermentasi, kadar air, cita rasa kopi atribut *fragrance*, aroma, rasa, *aftertaste*, *salt/acid*, *bitter/sweet*, keseimbangan, *mouthfeel*, keseragaman, *clean cup*, *overall*. Kopi yang memiliki skor paling tinggi yaitu kopi yang difermentasi selama 36 jam dan diberi perlakuan penambahan mikroba dari minuman probiotik dengan nilai total 83,38.

Kata Kunci: Minuman probiotik, *Coffea arabica* L., Lama Fermentasi, Bakteri Asam Laktat.

ABSTRACT

Talitha Sahda Fermana, NIM 4193220014 (2022). The Effect of Adding Microbes from Probiotic Drinks and Fermentation Time on the Quality of Arabica Coffee (*Coffea arabica* L.)

This study aims to determine the effect of adding microbes from probiotic drinks and fermentation time on the quality of Arabica coffee (*Coffea arabica* L.). This research was conducted on September 27 – November 29 2022 at the Integrated Laboratory of the Research Institute for Industrial and Freshener Plants (Balittri) Sukabumi, West Java. This type of research is an experimental study with a completely randomized factorial design. The number of treatments was 8 treatment combinations and 3 replications. Data analysis used Analysis of Variance (ANOVA) followed by the Tukey test. The parameters observed in this study were fermentation pH, water content, caffeine content and taste. From the results of the study it was found that the effect of adding microbes and fermentation time had a significant effect on fermentation pH, water content, caffeine content and taste attributes. The length of time of fermentation has a significant effect on the fermentation pH, water content, caffeine content and overall taste attributes. There is a significant interaction effect of the addition of microbes and the length of time of fermentation on caffeine content, and there is no significant effect of the interaction of the addition of microbes and the length of time of fermentation on the pH of the fermentation, water content, coffee taste attributes of fragrance, aroma, taste, aftertaste, salt/acid, bitter /sweet, balance, mouthfeel, uniformity, clean cup, overall. The coffee that had the highest score was coffee that was fermented for 36 hours and treated with the addition of microbes from probiotic drinks with a total value of 83.38.

Key Word: Probiotic Drinks, *Coffea arabica* L., Fermentation Time, Lactic Acid Bacteria.