Intisari

PENGARUH FORTIFIKASI MIKROALGA *Arthrospira platensis* PADA MINUMAN KAKAO TERHADAP KARAKTERISTIK, PREFERENSI DAN MINAT BELI KONSUMEN

Penelitian ini dilakukan untuk mengembangkan minuman fungsional dari cokelat dan *Arthrospira*. Pengujian minuman pada tahapan *pre-launching* diperlukan untuk mengetahui posisi produk minuman kakao komersial di pasaran. Tujuan dari penelitian ini yaitu untuk mengetahui preferensi dan persepsi konsumen, serta minat beli terhadap produk minuman kakao *Arthrospira* dan produk minuman kakao komersial. Sampel terdiri dari minuman kakao dengan (D) dan tanpa penambahan *Arthrospira* (T) serta minuman kakao komersial sebanyak 6 merk dengan kode CC, CD, DF, ML, BB, dan OV. Pengujian yang dilakukan meliputi uji fisik (kadar air, *wettability*, viskositas, dan kelarutan), analisis sensoris (*Quantitative Descriptive Analysis*, uji hedonik, minat beli, dan *Projective Mapping*), serta aktivitas antioksidan. Analisis data menggunakan uji *One Way Anova* 95% dan uji *Duncan's Multiple Range* (parametrik). Data pengujian *Quantitative Descriptive Analysis* (QDA) diolah menggunakan *Microsoft Excel*. Data pengujian *Projective Mapping* (PM) diolah menggunakan IBM SPSS 20. Hasil uji fisik, kadar air menunjukkan tidak berbeda nyata antar perlakuan (P>0,05), namun uji *wettability*, viskositas, dan kelarutan berbeda nyata antar perlakuan (P<0,05). Analisis antioksidan DPPH-RSA dan FRAP menunjukkan penambahan *Arthrospira* dapat meningkatkan kandungan antioksidan pada minuman kakao. Uji QDA pada minuman kakao *Arthrospira* menunjukkan aroma, rasa, dan *aftertaste* tepung rumput laut dan *Arthrospira* dapat tertutupi oleh cokelat. Uji hedonik berbeda nyata antar perlakuan (P<0,05) untuk seluruh atribut. Uji minat beli, persentase minuman kakao yang paling tertinggi yaitu BB sebesar 88,8%, sedangkan minuman kakao yang difortifikasi *Arthrospira* memperoleh persentase sebesar 51,8%. Alasan tertinggi dalam membeli produk minuman kakao yaitu aroma dan rasa. Uji PM menunjukkan persepsi konsumen tentang minuman kakao *Arthrospira* yaitu memiliki aroma, rasa, warna, dan harga yang mirip dengan beberapa minuman kakao komersial. Dengan demikian, produk minuman kakao *Arthrospira* diprediksi dapat bersaing dengan produk minuman kakao komersial di pasaran.

Kata kunci: *Arthrospira platensis*, minat beli, minuman kakao, preferensi konsumen, projective mapping

Abstract

EFFECT OF FORTIFIED MICROALGAE *Arthrospira platensis* ON COCOA DRINK
CHARACTERISTICS, PREFERENCES AND CONSUMERS BUYING INTENTION

This research was conducted to develop a functional drink from chocolate and Arthrospira. Beverage testing at the pre-launch is needed to determine the position of the cocoa beverage product, Arthrospira platensis, with commercial products on the market. The purpose of this study is to determine consumer preferences and perceptions as well as buying intention in beverage products such as cocoa Arthrospira and commercial cocoa beverage products. The samples consisted of cocoa drinks with (PA) and without the addition of Arthrospira (TA) and six brands of commercial cocoa drinks with codes CC, CD, DF, ML, BB, and OV. The tests carried out included physical tests (moisture content, wettability, viscosity, and solubility), sensory analysis (quantitative descriptive analysis, hedonic test, buying interest, and projective mapping), and antioxidant activity. Data analysis used the One-Way Anova 95% test and Duncan's Multiple Range (parametric data). Microsoft Excel was used to analyze the data. Data for Projective Mapping is processed using IBM SPSS 20. The findings of the physical test, specifically moisture content, were not substantially different between treatments ($P>0.05$), but the tests for wettability, viscosity, and solubility were ($P<0.05$). According to the Arthrospira QDA test, adding Arthrospira to cocoa drinks could boost their antioxidant content. The Arthrospira cocoa drink's QDA test revealed that chocolate may mask the odor, flavor, and aftertaste left by seaweed flour and Arthrospira. The hedonic test findings revealed significant differences between treatments for all variables ($P<0.05$). The buying intention findings indicate that BB cocoa drinks have the greatest percentage at 88.8%, followed by PA cocoa drinks with a percentage of 51.8%. Aroma and flavor were the two main factors influencing consumer decisions to purchase cocoa drink goods. The results of the PM test demonstrate that consumers perceive Arthrospira, a cocoa drink, to be comparable to several commercial cocoa drinks in terms of aroma, taste, color, and price. As a result, it is anticipated that the cocoa drink Arthrospira will be able to compete with other commercially available cocoa drink products.

Keywords: *Arthrospira platensis*, buying intention, cocoa drink, consumer preferences, projective mapping