

PENGARUH PENAMBAHAN FIKOSIANIN *Arthrospira platensis* TERHADAP KARAKTERISTIK DAN TINGKAT PENERIMAAN KONSUMEN PADA MINUMAN JELI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan fikosianin dari ekstrak *Arthrospira platensis* terhadap karakteristik fisik, kimiawi, dan tingkat penerimaan konsumen minuman jeli. Tahapan penelitian yang dilakukan yaitu ekstraksi fikosianin *A. platensis* dengan metode *freezing-thawing*, selanjutnya ditambahkan pada minuman jeli dengan konsentrasi 0%, 2%, 4%, 6, dan 8%. Pengujian produk minuman jeli meliputi viskositas, sineresis, pH, warna, kadar fikosianin, aktivitas antioksidan, dan organoleptik meliputi hedonik, *time intensity*, dan deskriptif. Rancangan penelitian yang digunakan yaitu Rancangan Acak Lengkap satu faktor (penambahan fikosianin dengan konsentrasi 0%, 2%, 4%, 6%, dan 8%). Data dianalisis menggunakan analisis varian dengan tingkat kepercayaan 95% dan dilanjutkan dengan uji DMRT (*Duncan Multiple Range Test*). Hasil penelitian menunjukkan bahwa penambahan fikosianin pada minuman jeli memberikan pengaruh yang berbeda nyata ($P < 0,05$) pada kadar fikosianin, pH, sineresis, viskositas, antioksidan, warna, dan hedonik (warna dan aroma). Minuman jeli dengan penambahan fikosianin 6% merupakan sampel terbaik karena disukai dan diterima oleh panelis dengan skor warna, aroma, rasa, dan tekstur berturut-turut adalah 7,22, 5,97, 5,98, dan 6,95 (skala 9), serta kadar fikosianin 0,034 mg/ml dan aktivitas antioksidan 61,75%. Pada analisis kimia sampel terbaik, penambahan fikosianin memberikan nilai protein (0,1%), lemak (0,03%), karbohidrat (9,12%), dan kadar abu (0,44%).

Kata kunci : *Arthrospira platensis*, fikosianin, minuman jeli, antioksidan, hedonik

THE EFFECT OF *Arthrospira platensis* PHYCOCYANIN ADDITION ON THE CHARACTERISTICS AND CONSUMER ACCEPTANCE OF JELLY BEVERAGES

This study aims to determine the effect of adding phycocyanin from *Arthrospira platensis* extract on the physical, chemical, and level of consumer acceptance of jelly drinks. The research stages carried out were the extraction of *A. platensis* phycocyanin using the freezing-thawing method, then adding it to the jelly drink at concentrations of 0%, 2%, 4%, 6, and 8%. Testing of jelly drink products includes viscosity, syneresis, pH, color, phycocyanin content, antioxidant activity, and organoleptics, including hedonic, time intensity, and descriptive. The research design used was a one-factor completely randomized design (addition of phycocyanin with concentrations of 0%, 2%, 4%, 6, and 8%). Data were analyzed using analysis of variance with a confidence level of 95% and continued with the DMRT test (Duncan Multiple Range Test). The results showed that the addition of phycocyanin to jelly drinks had a significantly different effect ($P < 0.05$) on phycocyanin levels, pH, syneresis, viscosity, antioxidants, color, and hedonics (color and aroma). The jelly drink with the addition of 6% phycocyanin was the best sample because it was liked and accepted by the panelists, with scores of color, aroma, taste, and texture, respectively, being 7.22, 5.97, 5.98, and 6.95 (scale 9), as well as phycocyanin levels of 0.034 mg/ml and antioxidant activity of 61.75%. In the chemical analysis of the best samples, the addition of phycocyanin provided protein (0,1%), fat (0,03%), carbohydrate (9,12%), and ash content (0,44%).

Keywords: *Arthrospira platensis*, phycocyanin, jelly drink, antioxidant, hedonic