

## ABSTRAK

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### **FORMULASI MINUMAN COKELAT *READY TO DRINK* DENGAN MENGGUNAKAN BERBAGAI SUMBER PROTEIN NABATI**

Skripsi, Fakultas Sains dan Teknologi (2024)

(xiv + 76 halaman ;7 gambar; 14 tabel; 11 lampiran)

Protein merupakan salah satu dari makronutrien yang memiliki banyak manfaat bagi tubuh. Sumber protein *sustainable* dapat diperoleh dari kacang – kacangan seperti kacang kedelai, kacang tolo, dan kacang merah. Kacang dapat dijadikan sumber protein dalam minuman cokelat *ready to drink* untuk menambah nilai jual dan fungsionalnya. Tujuan dari penelitian ini adalah untuk menentukan jenis kacang dan konsentrasi sari kacang yang menghasilkan minuman cokelat *ready to drink* dengan karakteristik terbaik dan menentukan umur simpannya. Minuman cokelat *ready to drink* dengan penambahan sari kacang merah 60% merupakan formulasi terpilih. Formulasi ini menghasilkan kadar protein sebesar  $3,46 \pm 0,05\%$ , pemisahan sebesar  $4,38 \pm 0,18\%$  setelah 3 hari, dan viskositas sebesar  $228,17 \pm 2,43$  cPs. Formulasi dengan penambahan sari kacang merah memiliki tingkat penerimaan “suka” berdasarkan uji hedonik, sedangkan konsentrasi sari kacang tidak berpengaruh terhadap penerimaan produk. Berdasarkan analisis pendugaan umur simpan metode *accelerated shelf-life test* dengan mengukur stabilitas produk, minuman cokelat *ready to drink* dapat disimpan hingga 7 hari pada suhu  $25^{\circ}\text{C}$ . Berdasarkan hasil uji *multiple comparison*, minuman cokelat *ready to drink* pada penelitian ini memiliki warna cokelat, aroma langu, rasa cokelat, *aftertaste* langu, dan kekentalan yang lebih cokelat, lebih langu, dan lebih kental dibandingkan dengan produk minuman cokelat *ready to drink* komersial.

Kata Kunci : protein nabati, sari kacang, minuman cokelat, protein, stabilitas

Referensi : 2002 - 2024

## ABSTRACT

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### **FORMULATION OF READY-TO-DRINK CHOCOLATE DRINK USING VARIOUS PLANT BASED PROTEIN SOURCES**

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(xiv + 76 pages; 7 pictures; 14 tables; 11 appendices)

Protein is one of the macronutrients that has many benefits for the body. Sustainable protein sources can be obtained from beans such as soybeans, tolo beans, and kidney beans. Beans can be used as a source of protein in ready-to-drink chocolate drinks to add to their selling and functional value. The purpose of this study was to determine the type of beans and the concentration of peanut extract that produces ready-to-drink chocolate drinks with the best characteristics and determine their shelf life. Ready-to-drink chocolate drink with the addition of 60% red bean extract is the selected formulation. This formulation resulted in a protein content of  $3.46 \pm 0.05\%$ , a separation of  $4.38 \pm 0.18\%$  after 3 days, and a viscosity of  $228.17 \pm 2.43$  cPs. Formulations with the addition of red bean extract have a "like" acceptance rate based on hedonic tests, while the concentration of beans extract has no effect on product acceptance. Based on the analysis of estimating the shelf life of the accelerated shelf-life test method by measuring product stability, ready-to-drink chocolate drinks can be stored for up to 7 days at a temperature of  $25^{\circ}\text{C}$ . Based on the results of multiple comparison tests, ready-to-drink chocolate drinks in this study have chocolate colour, beany aroma, chocolate taste, beany aftertaste, and viscosity that is browner, more beany, and thicker than commercial ready-to-drink chocolate beverage products.

Keywords : plant-based protein, beans extract, chocolate drink, protein, stability

Reference : 2002 - 2024