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**Pengembangan Sirup Bunga Telang (Clitoria ternatea L.) Dalam Inovasi Produk Koperasi Menggunakan
Metode Kansei dan Value Engineering**
Zahwa, Prof. Dr. Mirwan Ushada, S.T.P., M.App.Life.Sc.; Dr. Jumeri, S.T.P., M.Si.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

PENGEMBANGAN SIRUP BUNGA TELANG (*Clitoria ternatea* L.) DALAM INOVASI PRODUK KOPERASI MENGGUNAKAN METODE *KANSEI* DAN *VALUE ENGINEERING*

INTISARI

Penelitian ini bertujuan untuk mengembangkan sirup bunga telang (*Clitoria ternatea* L.) pada Koperasi Sunaring Rejeki Kaesti menggunakan metode *Kansei Engineering* dan *Value Engineering*. Penelitian dilakukan untuk memperoleh produk turunan bunga telang yang sebelumnya hanya dipasarkan dalam bentuk bunga kering. Metode *Kansei Engineering* digunakan untuk mengidentifikasi kebutuhan emosional konsumen melalui pengumpulan *kansei word*, penyusunan kuesioner *semantic differential*, dan analisis faktor. Selanjutnya, metode *Value Engineering* digunakan untuk menentukan konsep produk terbaik berdasarkan perbandingan antara performansi dan biaya produksi. Penelitian dilakukan melalui tahap informasi, kreativitas, analisis, pengembangan, dan rekomendasi. Pengujian produk meliputi uji sensoris hedonik terhadap atribut warna, rasa, dan aroma, serta pengujian kadar gula total dan Angka Lempeng Total (ALT). Hasil penelitian menunjukkan bahwa kata kansei terhadap sirup bunga telang meliputi karakteristik segar saat diminum, kreasi, unik, mudah diseduh, tanpa pewarna, bunga indah, warna biru menarik, aman dikonsumsi, dan aroma jahe/serai. Berdasarkan hasil perhitungan nilai (*value*), konsep sirup bunga telang dengan penambahan serai menjadi formula terbaik karena memiliki performansi dan biaya produksi paling optimal dibandingkan konsep lainnya. Produk yang dihasilkan memenuhi standar mutu sirup berdasarkan SNI 3544:2013 dengan kadar gula < 65% dan nilai ALT di bawah batas maksimum 5 x 10^2 koloni/mL. Hasil uji hedonik juga menunjukkan bahwa produk dapat diterima dengan baik oleh panelis terutama pada atribut warna dan aroma.

Kata kunci: bunga telang, sirup, *kansei engineering*, *value engineering*, pengembangan produk

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DEVELOPMENT OF BUTTERFLY PEA FLOWER SYRUP (Clitoria ternatea L.*) IN COOPERATIVE PRODUCT INNOVATION USING KANSEI AND VALUE ENGINEERING METHODS*

ABSTRACT

This research aims to develop butterfly pea flower (Clitoria ternatea L.*) syrup at Koperasi Sunaring Rejeki Kaesti using kansei engineering and value engineering methods. This research was conducted to developed a derivative product from the butterfly pea flowers, which was previously only marketed as dried flowers. The kansei engineering method was used to identify consumer emotional needs through the collection of kansei words, semantic differential questionnaires, and factor analysis. Furthermore, value engineering was applied to determine the best product concept based on comparison between performance and production cost. The research was carried out through the stages of information, creativity, analysis, development, and recommendation. Product testing included hedonic sensory evaluation on color, taste, and aroma attributes, as well as total sugar content and Total Plate Count (TPC) analysis. The results showed that kansei words for butterfly pea flower syrup included fresh when consumed, creative, unique, easy to brew, free from artificial coloring, beautiful flowers, attractive blue color, safe to consume, and ginger/lemongrass aroma characteristics. Based on the value calculation results, the concept of butterfly pea flower syrup with lemongrass addition was selected as the best formulation because it has the most optimal performance and production costs compared to other concepts. The developed product meet the syrup quality standards based on SNI 3544:2013, with sugar content of < 65% and TPC value below the maximum limit of 5 x 10^2 colonies/m*L*. Hedonic test results also indicated that the product was well accepted by panelists, especially in terms of color and aroma attributes.*

Keywords: butterfly pea flower, syrup, kansei engineering, value engineering, product development.