

PENGEMBANGAN FORMULA MINUMAN “JATIKA” DARI JAHE DAN TEMULAWAK DENGAN VARIASI PENCAAMPURAN SARI KURMA TERHADAP AKTIVITAS ANTIOKSIDAN

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ABSTRAK

Latar Belakang: Peningkatan kesadaran masyarakat akan gaya hidup sehat mendorong tingginya permintaan terhadap produk pangan fungsional berbasis rempah lokal. Jahe dan temulawak merupakan rimpang yang kaya senyawa bioaktif penangkal radikal bebas, namun memiliki karakteristik rasa pahit, kelat, dan pedas tajam yang kurang disukai konsumen. Penambahan sari kurma diharapkan dapat berfungsi sebagai pemanis alami sekaligus agen yang meningkatkan nilai fungsionalitas produk.

Tujuan: Mengetahui pengaruh variasi pencampuran sari kurma terhadap sifat fisik, sifat organoleptik, dan aktivitas antioksidan pada minuman "JATIKA" dari jahe dan temulawak.

Metode: Jenis penelitian ini adalah eksperimental murni menggunakan Rancangan Acak Sederhana (RAS) dengan empat perlakuan. Parameter fisik dianalisis secara deskriptif. Uji organoleptik menggunakan *Hedonic Scale Test* dan dianalisis dengan uji *Kruskal Wallis*. Pengukuran aktivitas antioksidan diukur dengan metode DPPH dan dianalisis dengan uji *One Way ANOVA* dilanjutkan uji *Duncan*.

Hasil: Hasil uji sifat fisik menunjukkan minuman JATIKA secara umum berwarna kuning keemasan hingga coklat kekuningan, beraroma temulawak dominan, kekentalan agak encer, serta memiliki penurunan intensitas rasa pahit dan pedas seiring bertambahnya sari kurma. Uji organoleptik menunjukkan tidak terdapat perbedaan tingkat kesukaan di antara seluruh formulasi pada semua parameter ($p > 0,05$). Hasil uji aktivitas antioksidan menunjukkan bahwa semakin tinggi penambahan sari kurma, maka kemampuan antioksidannya dalam menangkal radikal bebas semakin kuat. Formula D terpilih sebagai formula terbaik berdasarkan integrasi seluruh parameter kualitas.

Kesimpulan: Penambahan sari kurma pada minuman jahe dan temulawak berpengaruh signifikan terhadap peningkatan aktivitas antioksidan. Sedangkan pada uji sifat fisik dan uji sifat organoleptik tidak menunjukkan perbedaan.

Kata Kunci: Minuman Fungsional, Jahe, Temulawak, Sari Kurma, Antioksidan, DPPH, Organoleptik.

DEVELOPMENT OF “JATIKA” BEVERAGE FORMULA FROM GINGER AND CURCUMA WITH VARIATIONS IN DATE JUICE MIXTURE ON ANTIOXIDANT ACTIVITY

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ABSTRACT

Background: Growing public awareness of healthy lifestyles has driven high demand for functional food products made from local spices. Ginger and temulawak are rhizomes rich in bioactive compounds that act as free-radical scavengers; however, they have a bitter, astringent, and pungent taste that consumers tend to dislike. The addition of date extract is expected to serve as a natural sweetener and an agent that enhances the product’s functional value.

Objective: To determine the effect of varying date extract concentrations on the physical properties, organoleptic characteristics, and antioxidant activity of the “JATIKA” beverage made from ginger and temulawak.

Methods: This was a purely experimental study using a Simple Randomized Design (SRD) with four treatments. Physical parameters were analyzed descriptively. Organoleptic testing used the Hedonic Scale Test and was analyzed using the Kruskal-Wallis test. Antioxidant activity was measured using the DPPH method and analyzed using one-way ANOVA followed by Duncan’s multiple range test.

Results: The results of the physical property tests showed that JATIKA beverages generally ranged in color from golden yellow to yellowish brown, had a dominant temulawak aroma, were somewhat thin in consistency, and exhibited a decrease in bitterness and spiciness as the date extract content increased. Organoleptic tests revealed no significant differences in acceptability among all formulations across all parameters ($p > 0.05$). The results of the antioxidant activity tests showed that the higher the amount of date extract added, the stronger its antioxidant capacity in neutralizing free radicals. Formula D was selected as the best formula based on an evaluation of all quality parameters.

Conclusion: The addition of date juice to ginger and curcuma beverages has a significant effect on increasing antioxidant activity. However, no differences were observed in the physical and organoleptic tests.

Keywords: Functional Beverages, Ginger, Curcuma, Date Juice, Antioxidants, DPPH, Organoleptic.