ABSTRAK

Penelitian ini berjudul "Pengaruh Penambahan Daging Buah Naga Merah (*Hylocereus polyrhyzus*) Terhadap Aktivitas Antioksidan dan Sensori Pada Bolu Kukus", bertujuan untuk memproduksi bolu kukus berkadar antioksidan tinggi serta disukai oleh konsumen berdasarkan atribut warna, rasa, dan tekstur. Penelitian dilakukan dengan memvariasikan perbandingan massa buah naga merah dan air yang ditambahkan, yaitu 0:100, 10:90, 20:80, 30:70, 40:60, 50:50, 60:40, 70:30, 80:20, 90:10, dan 100:0. Uji fitokimia menunjukkan bahwa buah naga merah positif mengandung flavonoid, alkaloid, tanin, terpenoid, dan betasianin. Bolu kukus pada berbagai perbandingan dilakukan uji pendahuluan dengan melihat intensitas warna merahnya, hasil menunjukkan bahwa intensitas warna merah paling menarik dimulai dari perbandingan 50:50 hingga 100:0. Analisis organoleptik bolu kukus dilakukan menggunakan uji hedonik berdasarkan atribut warna, rasa, dan tekstur oleh 50 orang panelis tak terlatih, hasil menunjukkan bahwa bolu kukus dengan sifat organoleptik terbaik yang paling disukai panelis berdasarkan atribut warna yaitu 100:0, rasa yaitu 80:20, dan tekstur yaitu 0:100. Data hasil organoleptik diolah secara statistik menggunakan uji Kolmogorof-Smirnov (Uji Kenormalan) dan dihasilkan bahwa data organoleptik tidak normal sehingga perlu dilakukan uji Kruskal Wallis. Pada uji Kruskal Wallis, hasil menunjukkan bahwa atribut warna memberikan perbedaan secara nyata pada bolu kukus sedangkan rasa dan tekstur tidak memberikan perbedaan secara nyata. Uji aktivitas antioksidan buah naga merah dan bolu kukus dilakukan dengan metode DPPH yang diukur menggunakan spektrofotometer UV-Vis. Hasil menunjukkan bahwa aktivitas antioksidan buah naga merah sebesar 100% sedangkan bolu kukus dengan aktivitas antioksidan tertinggi pada perbandingan 90:10 yaitu sebesar 92,74%.

Kata Kunci: Aktivitas antioksidan, Bolu kukus, Buah naga merah

ABSTRACT

This study, that was titled "The Effect of Red Dragon Fruit (*Hylocereus polyrhyzus*) Flesh Addition to Antioxidant Activity and Sensory at the Steamed Cake", aims to produce high-grade antioxidant steamed cake that is accepted and favored by consumers based on color, taste, and texture attributes. The study was conducted by varying the ratio of red dragon fruit and water masses added, ie 0:100, 10:90, 20:80, 30:70, 40:60, 50:50, 60:40, 70:30, 80:20, 90:10, and 100:0. Phytochemical tests show that positive red dragon fruit contains flavonoids, alkaloids, tannins, terpenoids, and betacyanins. The steamed cake on various comparisons has done by preliminary test by looking at the intensity of red color, the results show that the intensity of red color is most interesting starting from the ratio of 50:50 to 100:0. The organoleptic analysis of the steamed cake was done using hedonic test based on the color, taste, and texture attributes by 50 untrained panelists, the result showed that the steamed cake with the best organoleptic properties most favored by panelists based on the color attribute is 100:0, the taste is 80:20, and the texture is 0:100. The organoleptic results data was processed statistically using Kolmogorof-Smirnov test (Normal Test) and it was produced that the organoleptic data was not normal so it was necessary to do Kruskal Wallis test. In the Kruskal Wallis test, the results show that the color attribute gives a significant difference in the steamed cake while the taste and texture do not give a significant differencess. Test of antioxidant activity of red dragon fruit and steamed cake was done by DPPH method measured using UV-Vis spectrophotometer. The results showed that the antioxidant activity of red dragon fruit is 100% while the steamed cake with the highest antioxidant activity at 90:10 ratio, the result is 92.74%.

Keywords: Antioxidant activity, Red dragon fruit, Steamed cake