

PENGARUH PENAMBAHAN EKSTRAK KAYU SECANG TERHADAP AKTIVITAS ANTIOKSIDAN DAN MUTU SENSORIS BOLU KUKUS

(The Effect of Sappan Wood Extract Adding on Antioxidant Activity and Sensory Quality of Cup Cake)

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ABSTRACT

*This study aims to determine the effect of sappan wood extract (*Caesalpinia sappan* L.) adding on antioxidant activity, moisture content, ash content, color, acidity (pH) and sensory quality (taste, color, texture, aroma) of cup cake. This study used a completely randomized design (CRD) with one factor, namely the concentration of sappan wood extract (0%, 3%, 6%, 9%, 12% and 15%). Parameters observed were color, antioxidant activity, acidity (pH), moisture content, ash content, and sensory quality (color, taste, aroma, texture). Observational data were analyzed by analysis of variance at a significant level of 5% using Costat Software. Then a further test was carried out with the Honestly Significant Difference (HSD) test at the 5% level. The results of the analysis showed a significantly different effect on antioxidant activity, color, hedonic and color scoring, taste, aroma, texture of cup cake. However, it gave no significant effect on the degree of acidity (pH), moisture content, ash content and hedonic aroma and texture of cup cake. The best treatment was obtained by adding 15% liquid extract of sappan wood with, antioxidant activity value 93.17%, moisture content 37.54%, ash content 0.64%, °Hue 39.81 (red) and color sensory quality which was hedonic preferred by the panelists and scoring a pink color, slightly bitter taste, the aroma did not have the typical sappan wood and a slightly soft texture.*

Keywords: Antioxidant, brazilin, cup cake, sappan wood.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan ekstrak kayu secang (*Caesalpinia sappan* L.) terhadap aktivitas antioksidan, kadar air, kadar abu, warna, dan mutu sensoris (rasa, warna, aroma, tekstur) bolu kukus. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan satu faktor yaitu konsentrasi ekstrak cair kayu secang (0%, 3%, 6%, 9%, 12% dan 15%). Parameter yang diamati adalah aktivitas antioksidan, kadar air, kadar abu, warna, derajat keasaman (pH) ekstrak kayu secang dan mutu sensoris (warna, rasa, aroma, tekstur). Data hasil pengamatan dianalisis dengan analisa keragaman (*Analysis of variance*) pada taraf nyata 5% menggunakan *Software Co-stat*. Kemudian dilakukan uji lanjut dengan uji Beda Nyata Jujur (BNJ) pada taraf 5%. Hasil analisis menunjukkan pengaruh yang berbeda nyata terhadap warna, aktivitas antioksidan hedonik dan *scoring* warna, rasa, aroma, tekstur bolu kukus. Namun memberikan pengaruh yang tidak berbeda nyata terhadap derajat keasaman (pH), kadar air, kadar abu serta hedonik aroma dan tekstur bolu kukus. Perlakuan terbaik diperoleh pada penambahan 15% ekstrak kayu secang dengan nilai aktivitas antioksidan 93,17%, kadar air 37,54%, kadar abu 0,64%, °Hue 39,81 (merah) dan mutu sensoris warna secara hedonik yang disukai oleh panelis dan secara *scoring* berwarna merah muda, berasa agak pahit, tidak beraroma khas kayu secang dan bertekstur agak lembut.

Kata Kunci : Antioksidan, bolu kukus, *brazilin*, kayu secang.