

ABSTRACT

THE EFFECT OF ADDITION OF PREMIUM TEMPEH STARTER ON THE SENSORY PROPERTIES OF TEMPEH

By

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This study aims to determine the effect of premium tempeh starter concentrations on the sensory properties of tempeh and to obtain premium tempeh yeast concentrations which produce tempeh with the best sensory properties. This study was conducted using a single factor Complete Randomized Block Design (CRBD) method (inoculum concentration) with 8 levels, 0% (K0), 0.3% (K1), 0.6% (K2), 0.9% (K3), 1.2% (K4), 1.5% (K5), 1.8% (K6), and the control used 0.2% Raprima yeast. Parameters observed were sensory properties (color, aroma, texture, taste and overall acceptance), total mold and total yeast. The data obtained were analyzed statistically using the Barlett and Tuckey tests and then continued with the analysis of variance and the BNJ test at the 5% level. The results showed that the concentration of premium tempeh yeast affected the water content of ready-to-ferment soybeans, color, aroma, texture, taste, overall acceptability, total amount of mold, total amount of yeast in tempe. Tempe yeast concentration of 1.5% produced tempe with the best sensory properties, namely white color and mycelium covering the entire tempe, typical tempeh aroma, compact texture and easy to slice, taste, overall acceptance favored by panelists, total mold of 9.24 log CFU /g, total yeast is 8.93 log CFU/g, and with chemical characteristics, namely water content 62%, protein content 10.72%, fat content 12.97%, crude fiber content 10.80%, ash content 1, 15%, and 12.44% carbohydrate content.

Keywords: *Tempeh, premium tempeh yeast, sensory, Saccharomyces cerevisiae, Rhizopus oligosporus.*

ABSTRAK

PENGARUH PENAMBAHAN RAGI TEMPE PREMIUM TERHADAP SIFAT SENSORI TEMPE

Oleh

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Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi ragi tempe premium pada sifat sensori tempe dan memperoleh konsentrasi ragi tempe premium yang menghasilkan tempe dengan sifat sensori terbaik. Penelitian ini dilakukan menggunakan metode Rancangan Acak Kelompok Lengkap (RAKL) faktor tunggal (konsentrasi inokulum) dengan 8 taraf, 0% (K₀), 0,3% (K₁), 0,6% (K₂), 0,9% (K₃), 1,2% (K₃), 1,5% (K₅), 1,8% (K₆), dan Kontrol menggunakan ragi Raprima 0,2%. Parameter pengamatan yaitu sifat sensori (warna, aroma, tekstur, rasa dan penerimaan keseluruhan), total kapang dan total khamir. Data yang diperoleh dianalisis secara statistik dengan uji Barlett dan Tuckey lalu dilanjutkan dengan analisis ragam dan uji BNJ pada taraf 5%. Hasil penelitian menunjukkan konsentrasi ragi tempe premium berpengaruh terhadap kadar air kedelai siap fermentasi, warna, aroma, tekstur, rasa, penerimaan keseluruhan, jumlah total kapang, jumlah total khamir pada tempe. Konsentrasi ragi tempe sebesar 1,5% menghasilkan tempe dengan sifat sensori terbaik yaitu warna putih dan miselium menyelimuti keseluruhan tempe, aroma khas tempe, tekstur yang kompak dan mudah diiris, rasa, penerimaan keseluruhan disukai oleh panelis, total kapang yaitu 9,24 log CFU/g, total khamir yaitu 8,93 log CFU/g, dan dengan karakteristik kimia yaitu kadar air 62%, kadar protein 10,72%, kadar lemak 12,97%, kadar serat kasar 10,80%, kadar abu 1,15%, dan kadar karbohidrat 12,44%.

Kata kunci: Tempe, ragi tempe premium, sensori, *Saccharomyces cerevisiae*, *Rhizopus oligosporus*