

PENGARUH KONSENTRASI RAGI TEMPE TERHADAP MUTU TEMPE KACANG GUDE (*Cajanus cajan*)

EFFECT OF TEMPEH YEAST CONCENTRATION ON TEMPEH QUALITY OF GUDE BEANS (*Cajanus cajan*)

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ABSTRACT

*This study aims to determine the effect of tempeh yeast concentration on the quality of tempeh gude beans (*Cajanus cajan*). The research design used was a Complete Randomized Design (CRD) with one factor consisting of 5 treatments of tempeh yeast concentration, namely: 1% ; 1.5% ; 2% ; 2.5% and 3% were repeated 3 times so that 15 experimental units were obtained. The parameters observed include tests of protein content, moisture content, antioxidant activity, organoleptic quality of color, compactness and aroma (hedonic and scoring methods), and total microbes. The observational data were tested with diversity analysis at a real level of 5% using Co-Stat software. If the observation results have a real difference, it is further tested with the Honest Real Difference (HRD) test. The results showed that yeast concentration has a significantly different influence on chemical quality (antioxidant activity, moisture content and protein content), microbiological quality (total mold) and organoleptic (color, compactness and aroma). Yeast concentration of 2.5% was the best treatment to produce tempeh gude beans with a moisture content value of 66.43%, protein content of 8.93%, total mold of 1.2×10^4 CFU/g, color, texture and aroma preferred by the panelists.*

Keywords : *Fermentation, Gude Beans, Quality, Tempeh Yeast*

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi ragi tempe terhadap mutu tempe kacang gude (*Cajanus cajan*). Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan satu faktor yang terdiri dari 5 perlakuan konsentrasi ragi tempe yaitu: 1 % ; 1,5% ; 2% ; 2,5% dan 3% yang dilakukan pengulangan sebanyak 3 kali sehingga diperoleh 15 unit percobaan. Parameter yang diamati meliputi kadar protein, kadar air, aktivitas antioksidan, mutu organoleptik warna, kekompakkan dan aroma (metode hedonik dan scoring), dan total mikroba. Data hasil pengamatan diuji dengan analisis keragaman pada taraf nyata 5% menggunakan *software Co-Stat*. Apabila hasil pengamatan terdapat perbedaan yang nyata maka diuji lanjut dengan uji Beda Nyata Jujur (BNJ). Hasil penelitian menunjukkan bahwa konsentrasi ragi memberikan pengaruh yang berbeda nyata terhadap mutu kimia (aktivitas antioksidan, kadar air dan kadar protein), mutu mikrobiologi (total kapang) dan organoleptik (warna, kekompakkan dan aroma). Konsentrasi ragi 3,0% merupakan perlakuan terbaik untuk menghasilkan tempe kacang gude dengan kadar air 68,70%, kadar protein 10,49%, aktivitas antioksidan 83,46%, total kapang $1,7 \times 10^4$ CFU/ml, warna, kekompakkan dan aroma yang disukai oleh panelis.

Kata Kunci : Fermentasi, Kacang Gude, Mutu, Ragi Tempe