

## **PENGARUH PENAMBAHAN SARI KURMA TERHADAP SIFAT KIMIA, MIKROBIOLOGI DAN ORGANOLEPTIK KEFIR SUSU KEDELAI (*Glycine max* (L.) Merr)**

*[The Effect from Concentration of Date Juice on Microbiological, Chemical and Organoleptic of Soy Milk Kefir (*Glycine max* (L.) Merr)]*

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### **ABSTRACT**

*This study aims to determine the effect of the concentration of date palm juice on the microbiological, chemical and organoleptic properties of soy milk (*Glycine max* (L.) Merr). The method used in this study was an experimental method with a single factor Completely Randomized Design (CRD) namely date palm juice concentration 0%, 5%, 10%, 15%, 20%, 25%. Parameters observed were microbiological properties (total lactic acid bacteria (LAB) and total yeast), chemical properties (total acid), physical properties (viscosity), and organoleptic properties (color, taste, and aroma). Observational data were analyzed by analysis of variance with a significance level of 5% using Co-Stat. if they are significantly different, further tests of orthogonal polynomials (chemical and physical parameters) are carried out. Honest Significant Difference Test (BNJ) (organoleptic parameters), while the microbiological parameters were analyzed descriptively. The results showed that the concentration of date palm juice had a significantly different effect on total lactic acid bacteria, total yeast, total acid, viscosity and organoleptic properties of soy milk kefir. Soy milk kefir with date palm juice concentration of 25% was the best treatment based on total lactic acid bacteria 9.78 log CFU/ml, yeast total 11 log CFU/ml, total acid 3%, viscosity 1520 cP, and organoleptic both hedonic and the best scoring panelists liked.*

**Keywords :** *Date palm juice, Microbiology, Soy milk kefir.*

### **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi sari kurma terhadap sifat mikrobiologi, kimia dan organoleptik susu kedelai (*Glycine max* (L.) Merr). Metode yang digunakan dalam penelitian ini adalah metode eksperimental dengan Rancangan Acak Lengkap (RAL) faktor tunggal yaitu konsentrasi sari kurma 0%, 5%, 10%, 15%, 20%, 25%. Parameter yang diamati yaitu sifat mikrobiologi (total bakteri asam laktat (BAL) dan total khamir), sifat kimia (total asam), sifat fisik (viskositas), dan sifat organoleptik (warna, rasa, dan aroma). Data hasil pengamatan dianalisis dengan analisis keragaman dengan taraf nyata 5% menggunakan *Co-Stat*. apabila berbeda nyata dilakukan uji lanjut polinomial ortogonal (parameter kimia dan fisik). Uji Beda Nyata Jujur (BNJ) (parameter organoleptik), sedangkan untuk parameter mikrobiologi dianalisis secara deskriptif. Hasil penelitian menunjukkan konsentrasi sari kurma memberikan pengaruh yang berbeda nyata terhadap total bakteri asam laktat, total khamir, total asam, viskositas dan sifat organoleptik kefir susu kedelai. Kefir susu kedelai dengan konsentrasi sari kurma 25% merupakan perlakuan terbaik berdasarkan total bakteri asam laktat 9,78 log CFU/ml, total khamir 11 log CFU/ml, total asam 3%, viskositas 1520 cP, serta organoleptik baik hedonik maupun skoring yang paling disukai panelis.

**Kata Kunci :** Kefir susu kedelai, Mikrobiologi, Sari kurma