KUALITAS FISIK KEFIR DENGAN PENAMBAHAN MADU DARI LEBAH KLANCENG (*Tetragonula laeviceps*)

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INTISARI

Madu klanceng sebagai sumber gula dan nutrien esensial berpotensi meningkatkan kualitas kefir. Penelitian ini bertujuan untuk mengetahui karakteristik fisik kefir dengan penambahan madu klanceng. Variabel yang diamati dalam penelitian ini meliputi kualitas fisik (viskositas, sineresis, keasaman, pH, kadar air, dan kadar alkohol) dengan perlakuan penambahan madu 0%, 4%, dan 8% serta replikasi sebanyak 3 kali. Data yang diperoleh diuji menggunakan *analysis of variance* (ANOVA). Data yang memiliki perbedaan yang nyata diuji lanjut menggunakan uji Duncan's Multiple Range Test (DMRT). Hasil penelitian menunjukkan bahwa penambahan madu klanceng berpengaruh nyata ($P<0,05$) terhadap pH, keasaman, kadar alkohol, kadar air, viskositas dan juga sineresis kefir. Perlakuan madu 0%, 4%, dan 8% masing-masing menghasilkan rerata meliputi pH sebesar 4,28, 4,21, dan 4,16. Keasaman sebesar 1,06%, 1,18%, dan 1,29%. Kadar alkohol sebesar 0,50%, 0,70%, dan 1,33%. Kadar air sebesar 89,69%, 85,62%, dan 83,00%. Viskositas sebesar 1156 cp, 1006,33 cp, dan 724 cp, serta sineresis sebesar 9,60%, 12,74%, dan 24,16%. Kesimpulannya, penambahan madu klanceng dapat mempengaruhi kualitas fisik kefir. Penambahan madu klanceng 4% dan 8% dapat meningkatkan keasaman, kadar air, kadar alkohol, dan sineresis, serta dapat menurunkan pH dan viskositas pada kefir.

Kata Kunci: Susu, Fermentasi, Kefir, Klanceng

PHYSICAL QUALITY OF KEFIR WITH ADDITIONAL HONEY FROM STINGLESS BEE *(Tetragonula laeviceps)*

ABSTRACT

Honey from stingless bee as a main source of sugar and essential nutrients has the potential to improve quality of kefir. The purpose of this study was to determine the physical characteristics of kefir with addition of stingless bee honey. Variables data observed in this study were physical quality (viscosity, syneresis, acidity, pH, water content, and alcohol content) with the addition of 0%, 4% and 8% honey with 3 times replication. The collected data were analysed statistically by variance (ANOVA). Significant differences were further tested using Duncan's new Multiple Range Test. The result showed that the addition of stingless bee honey had a significant effect (P<0,05) on pH, acidity, alcohol content, water content, viscosity and syneresis. The treatment of honey with 0%, 4%, dan 8% each produced an average covering pH of 4.28, 4.21, dan 4.16. Acidity was 1.06%, 1.18%, and 1.29%. Alcohol content was 0.50%, 0.70%, dan 1.33%. The water content was 89.69%, 85.62%, and 83.00%. Viscosity was 1156 CP, 1006,33 CP, and 724 CP. The syneresis was 9,60%, 12,74%, and 24,16%. The result of this study is the addition of stingless bee honey can affect the physical quality of kefir. The addition of 4% and 8% stingless bee honey can increase the acidity, water content, alcohol content, and syneresis and can reduce the pH and viscosity of kefir.

Key words: Milk, Fermentation, Kefir, Stingless bee honey