

**PENGARUH PEMBERIAN MADU DARI LEBAH KLANCENG
(*Tetragonula laeviceps*) TERHADAP KUALITAS MIKROBIOLOGIS
DAN SENSORIS KEFIR**

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INTISARI

Penelitian ini bertujuan untuk mengetahui efek pemberian madu klanceng (*Trigona sp.*) terhadap kualitas mikrobiologis dan sensoris kefir susu sapi dengan penambahan madu klanceng sebanyak 4%, dan 8%. Botol sampel steril yang telah disiapkan diisi dengan 250 ml susu sapi yang sudah dipasteurisasi pada suhu 90-95°C kemudian diinokulasi menggunakan starter kefir sebanyak 3% dan penambahan madu (madu klanceng) masing-masing sebanyak 0%, 4%, dan 8% diinkubasi pada suhu 28°C selama 18 jam. Kefir yang sudah jadi kemudian disaring dan disimpan di kulkas. Kefir susu sapi dinilai dari segi kualitas mikrobiologis (*total plate count*, *bakteri asam laktat* (BAL), dan *total yeast*) dan kualitas sensoris (warna, aroma, rasa, viskositas, dan daya terima keseluruhan). Analisis kualitas mikrobiologis menggunakan OneWay ANOVA dan dilanjutkan dengan Duncan's New Multiple Range Test (DMRT), sedangkan data hasil uji organoleptik dianalisis menggunakan analisis non parametrik, uji Kruskal-Wallis. Hasil penelitian menunjukkan bahwa kefir susu sapi dengan penambahan madu klanceng 4% dan 8% berpengaruh nyata ($p < 0,05$) terhadap kualitas mikrobiologis, yaitu meningkatkan TPC dan BAL, serta menurunkan *total yeast*. Penambahan madu klanceng 4% dan 8% berpengaruh nyata terhadap warna, rasa, dan daya terima keseluruhan, tetapi tidak berpengaruh nyata terhadap aroma dan viskositas. Kesimpulannya, penambahan madu klanceng 8% dapat menaikkan kualitas mikrobiologis dan sensoris kefir.

Kata Kunci: Klanceng, *Trigona sp*, Mikrobiologis, Sensoris

THE EFFECT OF GIVING HONEY FROM KLANCENG BEE (*Tetragonula laeviceps*) ON THE MICROBIOLOGICAL AND SENSORY QUALITY OF KEFIR

ABSTRACT

This study aims to determine the effect of giving klanceng honey (*Trigona* sp.) on the microbiological and sensory quality of cow's milk kefir with the addition of 4% and 8% of klanceng honey. Prepared sterile sample bottles filled with 250 ml of pasteurized cow's milk at 90-95°C then inoculated using 3% kefir starter and 0%, 4%, and 8% honey (Klanceng honey) respectively incubated at 28°C for 18 hours. The finished kefir is then filtered and stored in the refrigerator. Cow's milk kefir was assessed in terms of microbiological quality (total plate count, lactic acid bacteria (LAB), and total yeast) and sensory quality (color, aroma, taste, viscosity, and overall acceptability). Microbiological quality analysis used OneWay ANOVA and continued with Duncan's New Multiple Range Test (DMRT), while the data on organoleptic test results were analyzed using non-parametric analysis, the Kruskal-Wallis test. The results of the study showed that cow's milk kefir with the addition of 4% and 8% klanceng honey had a significant effect ($p < 0.05$) on microbiological quality, namely increasing TPC and LAB, and reducing total yeast. The addition of 4% and 8% klanceng honey had a significant effect on color, taste and overall acceptability, but had no significant effect on aroma and viscosity. In conclusion, the addition of 8% klanceng honey can improve the microbiological and sensory qualities of kefir.

Keywords: Klanceng, *Trigona* sp, Microbiology, Sensory