KUALITAS MIKROBIOLOGIS, KIMIA DAN SENSORIS MINUMAN SUSU TELUR MADU JAHE DENGAN PERBEDAAN PERSENTASE EKSTRAK JAHE (Zingiber officinale)

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INTISARI

Susu telur madu jahe (STMJ) merupakan produk susu fungsional yang mengandung kuning telur, madu dan ekstrak jahe. Penelitian ini bertujuan untuk mengetahui kualitas mikrobiologis, kimia dan sensoris STMJ dengan perlakuan penambahan ekstrak jahe 0; 5 dan 10% (b/v) dan penyimpanan *refrigerator* selama 0; 3 dan 6 hari. Pengujian kimia yang dilakukan meliputi kadar air, abu, protein, lemak, karbohidrat dan sensoris meliputi warna, rasa, aroma dan daya terima. Selama penyimpanan dilakukan pengujian mikrobiologis yaitu total mikrobia dan uji kimia *(*keasaman*,* pH, dan kadar asam lemak bebas). Analisis data menggunakan *one way ANOVA* dan *two way ANOVA* serta diuji lanjut dengan *Duncan's New Multiple Ranges Test* (DMRT). Hasil penelitian menunjukkan perlakuan penambahan ekstrak jahe berpengaruh nyata (P<0,05) terhadap total mikrobia, kadar lemak, air, rasa, dan aroma, tetapi tidak berpengaruh nyata (P>0,05) terhadap kadar abu, protein, karbohidrat, pH, keasaman, asam lemak bebas atau *free fatty acid* (FFA), warna, dan daya terima STMJ. Perlakuan penambahan ekstrak jahe 0; 5 dan 10% menghasilkan rerata untuk total mikrobia berturut-turut 5,16; 5,04 dan 4,98 log CFU/ml, kadar lemak 3,13; 2,89 dan 2,69%, kadar air 80,4; 81,62 dan 82,41%. Nilai sensoris dengan ekstrak jahe 0; 5; 10% berturut-turut untuk rasa (tingkat kepedasan) 1,73; 2,67 dan 3,2, dan untuk aroma susu 2,60; 3,93 dan 3,93. Selama penyimpanan 6 hari terjadi peningkatan yang signifikan (P<0,05) pada jumlah mikrobia dan FFA. Kesimpulannya, perlakuan penambahan ekstrak jahe 10% dapat menurunkan jumlah mikrobia dan kadar lemak serta meningkatkan kadar air serta kualitas sensoris STMJ. Namun demikian selama penyimpanan STMJ terjadi peningkatan jumlah total mikrobia dan FFA.

Kata kunci : Susu pasteurisasi, Jahe, Mikrobiologis, Kimia, Sensoris

MICROBIOLOGICAL, CHEMICAL AND SENSORICAL QUALITY OF HONEY GINGER EGG MILK DRINK WITH A DIFFERENT PERCENTAGE OF GINGER EXTRACT (*Zingiber officinale*)

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ABSTRACT

Ginger honey egg milk drink (STMJ) is a functional milk product that contains egg yolk, honey and ginger extract. This study aimed to determine the microbiological, chemical and sensorical quality of STMJ drink with the addition of 0; 5 and 10% (w/v) ginger extract and refrigerator storage for 0; 3 and 6 days. Chemical testing included moisture, ash, protein, fat, carbohydrate and sensory content including color, taste, aroma and acceptability. During storage, microbiological testing was carried out, namely the total microbial and chemical tests (acidity, pH and free fatty acid levels). Data analysis used one way ANOVA and two way ANOVA and was further tested with Duncan's New Multiple Ranges Test (DMRT). The results showed that the addition of ginger extract had a significant effect (P <0.05) on total microbes, levels of fat, water, taste, and aroma, but had no significant effect (P> 0.05) on levels of ash, protein, carbohydrates, pH. , acidity, free fatty acid (FFA), color, and STMJ acceptability. Ginger extract addition treatment 0; 5 and 10% yielded the mean for total microbes, respectively 5.16; 5.04 and 4.98 log CFU / ml, fat content 3.13; 2.89 and 2.69%, water content 80.4; 81.62 and 82.41%. Sensory value with ginger extract 0; 5; 10% for 1.73 taste, respectively; 2.67 and 3,2, and for aroma 2.60; 3.93 and 3.93. During 6 days of storage there was a significant increase (P <0.05) in the number of microbes and FFA. In conclusion, the addition of 10% ginger extract could reduce the number of microbes and fat content and increased the water content and sensory quality of STMJ. However, during STMJ storage, there was an increasing in the total number of microbes and FFA.

Keywords : Pasteurized milk, Ginger, Microbiological, Chemical, Sensory