

**KARAKTERISTIK MIKROBIOLOGIS, ORGANOLEPTIK, DAN
KIMIAWI YOGHURT SUSU KAMBING MENGGUNAKAN *Lactobacillus
plantarum* T14 DAN T35 DENGAN PENAMBAHAN PEMANIS STEVIA**

INTISARI

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Yoghurt dengan kandungan gula yang tinggi dapat menjadi masalah kesehatan bagi masyarakat jika dikonsumsi berlebihan, khususnya bagi penderita diabetes mellitus. Oleh karenanya dilakukan penelitian mengenai yoghurt susu kambing yang menggunakan stevia sebagai pemanis pengganti gula. Dalam penelitian ini digunakan dua faktor berupa dua strain bakteri yaitu *Lactobacillus plantarum* T14 dan *Lactobacillus plantarum* T35, serta tiga faktor konsentrasi stevia (0%; 0,25%; dan 0,5%). Dalam pembuatan yoghurt susu kambing tersebut dilakukan penambahan susu skim 10% dan inokulasi 1% (v/v) kultur bakteri kemudian dilakukan inkubasi pada suhu 37°C selama 16 jam. Yoghurt yang dihasilkan kemudian diuji karakteristik kimiawinya berupa kandungan protein, air, lemak, asam tertitrasi, dan kadar abu, yang didapatkan kisaran hasil sebagai berikut secara berturut-turut 6,48-6,57%; 78,11-80,45%; 5,03-5,16%; 0,56-0,61%; dan 1,50-1,55%. Selain uji kimiawi, dilakukan pula uji organoleptik dan uji mikrobiologis yang menghasilkan yoghurt susu kambing dengan strain bakteri *Lactobacillus plantarum* T14 dan konsentrasi stevia 0,25% paling disukai dengan nilai 6,01 dan yoghurt dengan strain bakteri *Lactobacillus plantarum* T14 dan konsentrasi stevia 0% paling tidak disukai dengan nilai 5. Hasil uji mikrobiologis pada yoghurt susu kambing dengan strain *Lactobacillus plantarum* T14 dan T35 berturut-turut menunjukkan kenaikan log bakteri sebesar 1,48-1,54 dan 0,17-0,45.

Kata kunci: yoghurt, susu kambing, stevia

**MICROBIOLOGICAL, ORGANOLEPTIC, AND CHEMICAL
CHARACTERISTICS OF GOAT MILK YOGHURT USING *Lactobacillus
plantarum* T14 AND T35 WITH ADDITION STEVIA SWEETENER**

ABSTRACT

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Yogurt with high sugar content can be a health problem for people if being consumed too much, especially for people with diabetes mellitus. Therefore, the research on goat milk yogurt using stevia as a sugar substitute sweetener was done. In this study two factors were used in the form of two bacterial strains namely *Lactobacillus plantarum* T14 and *Lactobacillus plantarum* T35, and factor of stevia concentration (0%; 0.25%; and 0.5%). In the manufacture of the goat milk yogurt, the milk was added with 10% skim milk and 1% (v / v) bacterial culture then incubated at 37° C for 16 hours. The resulting yogurt was then tested for its chemical characteristics in the form of protein, water, fat, titrated acid, and ash content, which obtained the following range of yields, respectively 6.48-6.57%; 78.11-80.45%; 5.03-5.16%; 0.56-0.61%; and 1.50-1.55%. In addition to chemical tests, organoleptic tests and microbiological tests were also carried out which produced goat milk yogurt with *Lactobacillus plantarum* T14 strain and stevia concentration of 0.25%, most preferably with a 6.01 value and yogurt with *Lactobacillus plantarum* T14 strain and 0% stevia concentration not preferred with a value of 5. The results of microbiological tests on goat milk yogurt with strains of *Lactobacillus plantarum* T14 and T35 respectively showed an increase in bacterial log of 1.48-1.54 and 0.17-0.45.

Keywords: yogurt, goat milk, stevia