

**KARAKTERISTIK KIMIA YOGURT SINBIOTIK DENGAN VOLUME
PUREE PISANG MULU BEBE (*Musa acuminata*) DAN PROBIOTIK
(*Lactobacillus casei*) YANG BERBEDA**

Warastiawati, dibawah bimbingan

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ABSTRAK

Penelitian bertujuan untuk mengetahui berapa lama pengaruh fermentasi terhadap Karakteristik Kimia Yogurt Sinbiotik Dengan Volume *Puree* Pisang Mulu Bebe (*Musa acuminata*) Dan Probiotik *Lactobacillus casei* dan bagaimana pengaruh konsentrasi inokulasi pada level perlakuan 0% bakteri, 2,5% bakteri, 5% bakteri dan 7,5% bakteri serta perlakuan *puree* pisang Mulu Bebe (*Musa acuminata*) pada volume 0 ml, 2 ml, 4 ml dan 6 ml. Rancangan yang digunakan dalam penelitian ini merupakan penelitian eksperimental dengan Rancangan Acak Lengkap 2 faktor (konsentrasi inokulasi bakteri dan level volume *puree* pisang) dengan 4 perlakuan dan 3 kali ulangan, masing-masing ulangan terdiri dari 3 sampel dengan lama fermentasi 72 jam. Perlakuan yang diberikan yaitu faktor A : konsentrasi volume inokulasi, faktor B : level volume sari pisang (*puree* pisang). Apabila terdapat perbedaan pengaruh antar perlakuan setiap faktor, maka dilanjutkan dengan uji Duncan. Parameter yang diamati diantaranya : pH, rendemen, kadar abu, kadar air dan kadar protein. Pengaruh fermentasi terhadap Karakteristik Kimia Yogurt Sinbiotik Dengan Volume *Puree* Pisang Mulu Bebe (*Musa acuminata*) Dan Probiotik *Lactobacillus*

casei Yang Berbedadengan lama fermentasi 72 jam berpengaruh terhadap nilai rendemen. Dimana semakin lama fermentasi semakin terjadinya proses pengasaman sehingga air dadih dan dadih akan sulit terpisah. Interaksi antara *puree* pisang mulu bebe dan inokulasi bakteri terhadap karakteristik yogurt memberikan pengaruh yang signifikan pada rendemen dan protein ($<0,01$) dan tidak signifikan pada kadar abu ($>0,05$) dan kadar air ($>0,01$) pada konsentrasi bakteri dan ($>0,05$) pada *puree* pisang. Pengaruh *puree* pisang mulu bebe yang berbeda memberikan pengaruh yang sangat nyata pada kadar protein ($<0,01$).

Kata kunci : Yogurt Sinbiotik, *Puree* Pisang Mulu Bebe, *Lactobacillus casei*

**CHEMICAL CHARACTERISTICS OF SINBIOTIC YOGURT WITH
DIFFERENT VOLUMES OF PUREE BANANA BEBE (*Musa acuminata*) AND
PROBIOTICS (*Lactobacillus casei*)**

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ABSTRACT

The aim of this study was to determine how long the effect of fermentation on the chemical characteristics of synbiotic yogurt with banana puree volume of Mulu Bebe (*Musa acuminata*) and *Lactobacillus casei* probiotics and how the effect of inoculation concentration on treatment levels was 0% bacteria, 2.5% bacteria, 5% bacteria and 7,5% bacteria and treatment of Mulu Bebe banana puree (*Musa acuminata*) at a volume of 0 ml, 2 ml, 4 ml and 6 ml. The design used in this study was an experimental study with a completely randomized design with 2 factors (bacterial inoculation concentration and volume level of banana puree) with 4 treatments and 3 replications, each of which consisted of 3 samples with a fermentation time of 72 hours. The treatments given were factor A: inoculation volume concentration, factor B: volume level of banana juice (banana puree). If there

is a difference in the effect between the treatments for each factor, it is followed by the Duncan test. Parameters observed included: pH, yield, ash content, moisture content and protein content. The effect of fermentation on the chemical characteristics of synbiotic yogurt with the volume of banana puree Mulu Bebe (*Musa acuminata*) and the probiotic *Lactobacillus casei*. Different from the 72 hours fermentation time affected the yield value. Where the longer the fermentation, the more the acidification process occurs so that the whey and curd will be difficult to separate. The interaction between mulu bebe banana puree and bacterial inoculation on the characteristics of yogurt had a significant effect on yield and protein (<0.01) and insignificant on ash content (>0.05) and water content (>0.01) on bacterial concentrations. and (>0.05) in banana puree. The different effect of mulu bebe banana puree had a very significant effect on protein content (<0.01).

Keywords: Sinbiotic Yogurt, Mulu Bebe Banana Puree, *Lactobacillus casei*