

ABSTRAK

Oki Nur Fahrulusi. Penelitian “Pengaruh Penambahan Bubuk Kayu Secang (*Caesalpinia sappan* L.) dengan Persentase yang Berbeda terhadap Viskositas dan Sineresis pada Yoghurt Susu Sapi” dilaksanakan pada tanggal 3-13 Maret 2025 di Laboratorium Teknologi Hasil Ternak, Fakultas Peternakan, Universitas Jenderal Soedirman, Purwokerto. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan bubuk kayu secang yang berbeda terhadap viskositas dan sineresis yoghurt susu sapi, serta persentase penambahan kayu secang terbaik dari semua perlakuan. Materi yang digunakan dalam penelitian yaitu susu sapi sebanyak 10.000 g yang diperoleh dari *Experimental Farm* Fakultas Peternakan, Universitas Jenderal Soedirman, starter sebanyak 25 g (*Lactobacillus bulgaricus*, *Streptococcus thermophilus*, dan *Lactobacillus acidophilus*), dan bubuk kayu secang sebanyak 50 g. Alat yang digunakan dalam penelitian yaitu kompor gas, panci, pengaduk, *thermometer*, jar, timbangan digital, inkubator, *refrigerator*, *food dehydrator*, mesin *grinder*, viskometer, tabung *sentrifuge*, dan *sentrifuge*. Metode penelitian yang digunakan merupakan penelitian eksperimental menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 4 ulangan. Perlakuan yang diberikan yaitu yoghurt susu sapi dengan penambahan bubuk kayu secang sebanyak 0,1% (P_1), 0,3% (P_2), 0,5% (P_3), 0,7% (P_4), dan 0,9% (P_5). Data hasil penelitian dianalisis menggunakan analisis variansi (ANOVA). Hasil analisis menunjukkan bahwa penambahan bubuk kayu secang berpengaruh tidak nyata terhadap viskositas dan sineresis ($P>0,05$). Rata-rata nilai viskositas sebesar $1007,97 \pm 115,78$ cP dan sineresis sebesar $65,18 \pm 3,84\%$. Kesimpulan yang diperoleh dari penelitian ini adalah penambahan bubuk kayu secang dengan persentase yang berbeda menunjukkan nilai yang relatif sama terhadap viskositas dan sineresis yoghurt susu sapi.

Kata kunci: yoghurt, bubuk kayu secang, viskositas, sineresis

ABSTRACT

Oki Nur Fahrulusi. The study titled “The Effect of Adding Secang Wood Powder (*Caesalpinia sappan* L.) at Different Percentages on Viscosity and Syneresis in Cow's Milk Yogurt” was conducted from March 3 to 13, 2025, at the Animal Product Technology Laboratory, Faculty of Animal Science, Jenderal Soedirman University, Purwokerto. This study aimed to determine the effect of adding different percentages of secang wood powder on the viscosity and syneresis of cow's milk yogurt, as well as the optimal percentage of secang wood powder among all treatments. The materials used in the study included 10,000 g of cow's milk obtained from the Experimental Farm of the Faculty of Animal Science, Jenderal Soedirman University, 25 g of starter culture (*Lactobacillus bulgaricus*, *Streptococcus thermophilus*, and *Lactobacillus acidophilus*), and 50 g of secang wood powder. The equipment used in the study included a gas stove, pot, stirrer, thermometer, jar, digital scale, incubator, refrigerator, food dehydrator, grinder, viscometer, centrifuge tube, and centrifuge. The research method employed was an experimental study using a Completely Randomized Design (CRD) with 5 treatments and 4 replications. The treatments administered were cow's milk yogurt with the addition of secang wood powder at 0.1% (P_1), 0.3% (P_2), 0.5% (P_3), 0.7% (P_4), and 0.9% (P_5). The research data were analyzed using analysis of variance (ANOVA). The analysis results showed that the addition of secang wood powder had no significant effect on viscosity and syneresis ($P>0.05$). The average viscosity value was 1007.97 ± 115.78 cP and syneresis was $65.18 \pm 3.84\%$. The conclusion drawn from this study is that the addition of secang wood powder at different percentages resulted in relatively similar values for the viscosity and syneresis of cow's milk yogurt.

Keywords: yogurt, secang wood powder, viscosity, syneresis