

RINGKASAN

RIKA DINI AMBARWATI “Penggunaan Sumber Karbohidrat Yang Berbeda Pada Pembuatan *Concentrated Yoghurt* Lemak Rendah Terhadap Kadar Air, Total Padatan Dan *Yield*”. Penelitian dilaksanakan pada tanggal 7 sampai 14 Desember 2015 di Laboratorium Teknologi Hasil Ternak dan Laboratorium Ilmu Bahan Makanan Ternak Fakultas Peternakan Universitas Jenderal Soedirman Purwokerto. Penelitian bertujuan untuk mengevaluasi pengaruh penggunaan sumber karbohidrat yang berbeda pada pembuatan *concentrated yoghurt* lemak rendah terhadap kadar air, total padatan dan *yield*. Materi penelitian menggunakan susu sapi, starter bakteri komersial, inulin, dan pati ubi jalar. Metode penelitian yang digunakan adalah metode eksperimen dengan menggunakan rancangan acak lengkap (RAL). Perlakuan terdiri atas P₀: *concentrated yoghurt* susu lemak penuh, P₁: *concentrated yoghurt* susu lemak rendah, P₂: *concentrated yoghurt* susu lemak rendah + inulin 2%, P₃: *concentrated yoghurt* susu lemak rendah + pati ubi jalar putih 2%. Setiap perlakuan diulang sebanyak 5 kali. Peubah yang diukur adalah kadar air, total padatan, dan *yield*. Data dianalisis menggunakan analisis variansi dan dilanjutkan dengan uji *contras orthogonal*. Hasil penelitian menunjukkan bahwa kadar air, total padatan dan *yield concentrated yoghurt* yang berasal dari susu lemak penuh, susu lemak rendah, dan susu lemak rendah dengan penambahan inulin, susu lemak rendah dengan penambahan pati ubi jalar secara berurutan terhadap kadar air yaitu 76,5%, 83%, 79,6%, 72,4%; total padatan yaitu 23,5%, 16,8%, 20,4%, 27,6%, dan *yield* yaitu 29%, 25,0%, 26,8%, 30,9%. Kesimpulan dari penelitian adalah penambahan pati ubi jalar putih pada pembuatan *concentrated yoghurt* lemak rendah dapat menurunkan kadar air, meningkatkan total padatan dan *yield* dibanding dengan penambahan inulin.

SUMMARY

RIKA DINI AMBARWATI "The Use of Different Carbohydrate Sources for the Production of Low Fat Concentrated Yoghurt, and Its Effects on Moisture, Total Solids and Yield". The research was conducted from 7th until 14th December 2015, at the Laboratory of Animal Product Technology and Laboratory of Animal Feed Stuff, Faculty of Animal Science, Jenderal Soedirman University, Purwokerto. The research aimed to evaluate the effects of different carbohydrate sources on moisture and total solids contents, and yield of low fat concentrated yogurts. The materials used were cow's milk, commercial lactic acid bacteria starter, inulin, and white sweet potato starch. The research was done experimentally by using a completely randomized design (CRD). The treatment consisted of P₀: full fat concentrated yoghurt, P₁: low fat concentrated yoghurt, P₂: low fat concentrated yoghurt + 2% inulin, P₃: low fat concentrated yoghurt + 2% white sweet potato starch. Each treatment was repeated 5 times. The variables measured were moisture content, total solids, and yield. Data were analyzed using analysis of variance followed by contras orthogonal test. Results showed that concentrated yoghurt made from full fat milk, low fat milk, low fat milk + inulin, and low fat milk + white sweet potato starch has water content of 76,5%, 83%, 79,6%, 72,4%, respectively; total solids of 23,5%, 16,8%, 20,4%, 27,6%, respectively and yield of 29%, 25,0%, 26,8%, 30,9%, respectively. In conclusion, the addition of white sweet potato starch was able to reduce moisture, but increase total solid contents and yield of low fat concentrated yoghurt than addition of inulin.