

## ABSTRAK

**TRAS AMBORO** Total Padatan dan Kadar Protein Keju Mozzarella yang Diberi Air Perasan Lemon (*Citrus limon*) pada Level Berbeda, telah dilaksanakan pada tanggal 13 Februari 2019 sampai 19 Februari 2019 di Laboratorium Teknologi Hasil Ternak, Fakultas Peternakan, Universitas Jenderal Soedirman, Purwokerto. Tujuan penelitian adalah mengkaji pengaruh penambahan air perasan lemon terhadap total padatan dan kadar protein pada keju mozzarella. Materi yang digunakan dalam penelitian yaitu susu sapi 30 liter, rennet 7,5 ml, air perasan lemon 750 ml untuk 5 kali ulangan, termometer, kompor dan gas, panci, pengaduk, gelas ukur, timbangan digital, labu ukur, pipet tetes, saringan, kain penyaring, alat tulis, seperangkat alat pengujian kadar protein dan total padatan. Metode penelitian dilakukan secara eksperimen dengan menggunakan Rancangan Acak Lengkap (RAL) yang terdiri dari empat perlakuan dan lima kali ulangan. Perlakuan yaitu penambahan air perasan lemon dengan level 0,5 % (R<sub>1</sub>), 0,75 % (R<sub>2</sub>), 1 % (R<sub>3</sub>), 1,25 % (R<sub>4</sub>). Variabel yang diamati adalah total padatan dan kadar protein. Hasil penelitian menunjukkan bahwa total padatan keju mozzarella yang dibuat dengan penambahan air perasan lemon dengan level 0,5 % (R<sub>1</sub>), 0,75 % (R<sub>2</sub>), 1 % (R<sub>3</sub>), dan 1,25 % (R<sub>4</sub>) masing-masing yaitu 45,43 ± 2,27 %, 45,18 ± 2,72 %, 47,57 ± 4,68 %, dan 42,02 ± 1,01 %. Kadar protein keju mozzarella yang dibuat dengan penambahan air perasan lemon dengan level 0,5 % (R<sub>1</sub>), 0,75 % (R<sub>2</sub>), 1 % (R<sub>3</sub>), dan 1,25 % (R<sub>4</sub>) masing-masing yaitu 53,94 ± 8,28 %, 51,66 ± 2,98 %, 52,75 ± 3,25 %, dan 52,22 ± 2,04%. Hasil analisis variansi menunjukkan bahwa peningkatan level air perasan lemon pada pembuatan keju mozzarella berpengaruh tidak nyata ( $P > 0,05$ ) terhadap total padatan dan kadar protein keju mozzarella. Keju mozzarella yang diberi air perasan lemon sampai level 1,25% menghasilkan total padatan dan kadar protein yang relatif sama.

## ABSTRACT

**TRAS AMBORO** *Total Solids and Protein Levels of Mozzarella Cheese Given with Lemon Juice (Citrus limon) at Different Levels, was held on February 13<sup>th</sup>, 2019 until February 19<sup>th</sup>, 2019 at the Laboratory of Animal Product Technology, Faculty of Animal Husbandry, Jenderal Soedirman University, Purwokerto. The purpose of this study was to examine the effect of adding lemon juice to total solids and protein content in mozzarella cheese. The material used in this study is 30 liters of cow's milk, 7.5 ml of rennet, 750 ml of lemon juice for 5 replications, thermometer, stove and gas, pan, stirrer, measuring cup, digital scales, pumpkin measuring, drip pipette, filter, filter cloth, stationery, a set of testing tools for protein content and total solids. The research method was carried out experimentally using a Completely Randomized Design (CRD) consisting of four treatments and five replications. The treatment is adding lemon juice with a level of 0.5% (R1), 0,75% (R2), 1% (R3), 1,25% (R4). The variables observed were total solids and protein levels. The results showed that the total solids of mozzarella cheese were made by adding lemon juice with levels of 0.5% (R1), 0.75% (R2), 1% (R3), and 1.25% (R4), respectively  $45,43 \pm 2,27$  %,  $45,18 \pm 2,72$  %,  $47,57 \pm 4,68$  %, dan  $42,02 \pm 1,01$  %. The protein content of mozzarella cheese is made by adding lemon juice with a level of 0.5% (R1), 0.75% (R2), 1% (R3), and 1.25% (R4), respectively  $53,94 \pm 8,28$  %,  $51,66 \pm 2,98$  %,  $52,75 \pm 3,25$  %, dan  $52,22 \pm 2,04$ %. The results of the variance analysis showed that the increase in lemon juice level in the manufacture of mozzarella cheese had no significant effect ( $P > 0.05$ ) on the total solids and protein content of mozzarella cheese. The mozzarella cheese given lemon juice to level 1.25% produces a total solid and relatively similar protein content.*