# RINGKASAN

**SYARI NIDA AULIA**. Pengaruh Pemberian Perasan Lemon (*Citrus limon*) pada Pembuatan Keju *Mozarella* Terhadap Tingkat Keasaman dan Tekstur. Penelitian dilaksanakan pada tanggal 13 Februari 2019 sampai dengan 28 maret 2019 di Laboratorium Teknologi Hasil Ternak Fakultas Peternakan Universitas Jenderal Soedirman Purwokerto, tujuannya untuk mengetahui pengaruh penambahan air perasan lemon terhadap tingkat keasaman dan tekstur pada keju *mozarella*. Materi penelitian yang digunakan adalah susu sapi 30 liter, 232,5 ml air perasan lemon, rennet 50 ml, garam 300 g, air panas 2 liter, air es 2 liter, aquadest 700 ml, larutan buffer 100 ml, metode penelitian yang digunakan yaitu eksperimen menggunakan Rancangan Acak Lengkap (RAL) dengan 4 perlakuan 5 ulangan. Data yang diperoleh dianalisis dengan analisis variansi dan dilanjutkan dengan uji ortogonal polinomial. Perlakuan yang diberikan yaitu R1= 0,5%, R2= 0,75%, R3= 1%, R4= 1,25%. Hasil penelitian menunjukkan penambahan air perasan lemon yang berbeda pada pembuatan keju *mozarella* untuk tingkat keasaman berpengaruh tidak nyata ($P>0,05$) dengan rata-rata 7, sedangkan pada tekstur berpengaruh sangat nyata ($P<0,01$), yaitu R1= 0,36 mm/g/dt, R2= 0,31 mm/g/dt, R3= 0,28 mm/g/dt dan R4= 0,20 mm/g/dt dengan rata-rata 0,29 mm/g/dt. Hasil uji ortogonal polinomial yaitu $Y= 0,4111-0,0564X-0,088X^2$ dengan $R^2= 65,96\%$. Semakin tinggi penambahan perasan air lemon hingga 1,25%, tingkat keasaman relatif sama, tekstur keju semakin lunak dan mudah rapuh

## SUMMARY

**SYARI NIDA AULIA**. Effect of Citrus Limon on Making Mozarella Cheese Against Acidity and Texture. The study was conducted on February 13, 2019 until March 28, 2019 at the Laboratory of Animal Product Technology, Faculty of Animal Husbandry, Jenderal Sudirman University, Purwokerto, the purpose of which was to determine the effect of adding lemon juice to the acidity and texture of mozzarella cheese. The research material used was 30 liters of cow's milk, 232.5 ml of lemon juice, 50 ml of rennet, 300 g of salt, 2 liters of hot water, 2 liters of ice water, 700 ml of aquadest, 100 ml buffer solution, the research method used was the experiment used a Completely Randomized Design (CRD) with 4 treatments 5 replications. The data obtained were analyzed by variance analysis and followed by orthogonal polynomial tests. The treatment given is R1 = 0.5%, R2 = 0.75%, R3 = 1%, R4 = 1.25%. The results showed that the addition of different lemon juice in the making of mozzarella cheese for acidity a significant not effect (P> 0.05) with an average of 7, while the texture had a very significant effect (P <0.01), which is R1= 0,36 mm/g/s, R2= 0,31 mm/g/s, R3= 0,28 mm/g/s and R4= 0,20 mm/g/s with an average 0,29 mm/g/s. The result of the polynomial orthogonal are $Y= 0,4111-0,0564X-0,088X^2$ with $R^2= 65,96\%$. The conclusion is that the higher the addition of lemon juice up to 1.25%, the acidity level is relatively the same, texture of the cheese is more soft and brittle.