RINGKASAN

ANGGI SITI ANGGRAENI WARDIANA. Penelitian dilaksanakan tanggal 17 April - 24 Mei 2017 di Laboratorium Ilmu Bahan Makanan Ternak, Fakultas Peternakan, Universitas Jenderal Soedirman, Purwokerto. Tujuan penelitian adalah mengkaji pengaruh konsentrasi ekstrak nanas dan lama perendaman terhadap rendemen dan warna gelatin serta interaksinya. Materi penelitian berupa 18.000 g tulang paha ayam broiler, 1.050 g nanas, akuades, 2.100 ml larutan NaCl 0,8% dan air bersih. Penelitian menggunakan Rancangan Acak Lengkap (RAL) pola Faktorial 4x3x3 dengan dua faktor yakni Faktor (K) konsentrasi ekstrak nanas (K0 = 0%, K1 = 5%, K2 = 10%, K3 = 15%) dan faktor (L) lama perendaman (L1 = 2 jam, L2 = 4 jam, L3 = 6 jam), setiap perlakuan diulang 3 kali. Hasil analisis variansi kosentrasi ekstrak nanas berpengaruh ($P<0,01$), sedangkan lama waktu perendaman dan interaksi antara konsentrasi ekstrak nanas dan lama perendaman tidak berpengaruh ($P>0,05$) terhadap rendemen gelatin. Hasil uji lanjut orthogonal polinomial menunjukan besar pengaruh kosentrasi terhadap rendemen gelatin 73,75%. Hasil analisis variansi konsentrasi ekstrak nanas dan lama waktu perendaman berpengaruh ($P<0,01$), sedangkan interaksinya tidak berpengaruh ($P>0,05$) terhadap warna gelatin. Hasil uji lanjut besarnya pengaruh konsentrasi ektrak nanas terhadap warna 13,88% dan pengaruh lama perendaman 36,26%. Kesimpulan, peningkatan konsentrasi ekstrak nanas dan lama perendaman menghasilkan rendemen dan warna gelatin yang sama, dengan konsentrasi optimal 9,26%.

Kata Kunci : Gelatin, Tulang Ayam Broiler, Ekstrak Nanas, Lama Perendaman, Rendemen, Warna.

SUMMARY

ANGGI SITI ANGGRAENI WARDIANA. This research was conducted on April 17th to May 24th, 2017 at Animal Feed Material Laboratory of Faculty of Animal Husbandry, Jenderal Soedirman University, Purwokerto. The aims of this study is to examined the interaction between pineapple extract concentration and different soaking times on the yield and color of gelatin. The materials used in this study were thigh bone chicken as much as 18,000 g, pineapple 1.050 g, distilled water, 0.8% NaCl solution 2.100 ml and clean water. The experimental design used in the study was Completely Randomized Design (CRD) Factorial pattern 4x3x3 with two factors namely first (K) concentration of pineapple extract (K0 = 0%, K1 = 5%, K2 = 10%, K3 = 15%) and factor (L) soaking time (L1 = 2 hours, L2 = 4 hours, L3 = 6 hours) each treatment repeated 3 times. The results of variance analysis showed that the concentration of pineapple extract was during significant (P <0.01) on the gelatin yield, while the soaking times and the interaction between pineapple concentration and soaking times no significant effect (P> 0,05) on the gelatin yield. Orthogonal polynomial test result showed the effect of concentration on yield gelatin is 73,75%. The result of variance analysis showed that the concentration of pineapple extract and the duration of soaking time had significant effect (P <0.01) on gelatin color, while the interaction not significant (P> 0,05) to gelatin color. Based on the results of further tests the effect of pineapple extract concentration on the color 13,88% and influence of soaking times 36,26%. Conclusion, the increase of pineapple extract concentration and soaking time resulted in the same yield and gelatin color, with optimal concentration of 9,26%.

Keywords : Gelatin, Broiler Chicken Bone, Pineapple Extract, Soaking Time, Yield, Color.