

PENGARUH PENGGUNAAN ASAP CAIR TEMPURUNG KELAPA DAN
LAMA PENYIMPANAN TERHADAP KUALITAS FISIK DAGING

KAMBING (*Capra aegagrus hircus*)

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INTISARI^{*)}

Penelitian ini mempunyai tujuan untuk mengetahui pengaruh penggunaan asap cair tempurung kelapa dan lama penyimpanan terhadap kualitas fisik daging kambing. Penelitian dilaksanakan di Laboratorium Produksi Ternak, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta dan Laboratorium Teknologi Hasil Ternak Universitas Gadjah Mada Yogyakarta pada tanggal 31 Oktober – 14 November 2018. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola faktorial 3 x 3 menggunakan 3 kali ulangan. Faktor I perlakuan konsentrasi asap cair K1 (0%), K2 (5%), dan K3 (10%). Faktor II lama penyimpanan L1 (0 hari), L2 (7 hari), dan L3 (14 hari). Data dianalisis menggunakan *Analysis of Variance* (ANOVA), jika ada perbedaan nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DMRT). Peubah yang diamati yaitu nilai pH, daya ikat air (DIA), susut masak, dan keempukan. Hasil penelitian ini menunjukkan terdapat interaksi antar perlakuan terhadap nilai pH. Nilai pH K1 (6,83); K2 (6,11); K3 (6,1); dan L1 (6,28); L2 (6,60); L3 (6,13). Nilai daya ikat air (DIA) K1 (36,20%); K2 (36,61%); K3 (34,44%); dan L1 (36,02%); L2 (37,17%); L3 (34,06%). Nilai susut masak K1 (34,00%); K2 (37,22%); K3 (40,44%); dan K1 (35,00%); K2 (37,44%); K3 (39,22%). Nilai keempukan K1 (4,81 kg/cm²); K2 (4,68 kg/cm²); K3 (4,37 kg/cm²); dan L1 (4,58 kg/cm²); L2 (4,66 kg/cm²); L3 (4,62 kg/cm²). Nilai TPC bakteri K1 (50,50 x 10⁴ CFU/gram); K2 (31,83 x 10⁴ CFU/gram); K3 (20,16 x 10⁴ CFU/gram); dan L1 (25,66 x 10⁴ CFU/gram); L2 (33,16 x 10⁴ CFU/gram); L3 (43,66 x 10⁴ CFU/gram). Berdasarkan hasil penelitian ini disimpulkan bahwa penggunaan asap cair terbaik adalah K3 (konsentrasi 10%) dan lama penyimpanan terbaik adalah L1 (0 hari).

Kata kunci : Daging kambing, asap cair tempurung kelapa, lama penyimpanan, kualitas fisik, TPC.

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**THE EFFECT OF COCONUT SHELL LIQUID SMOKE USING AND
STORAGE TIME ON PHYSICAL QUALITY OF GOAT
(*Capra aegagrus hircus*) MEAT**

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ABSTRACT^{*)}

This research aimed to determine the effect of using coconut shell liquid smoke and storage time on physical quality of goat meat. This research was carried out at the Laboratory of Animal Production, Agroindustry Faculty, Mercu Buana University Yogyakarta and the Gadjah Mada University Animal Husbandry Technology Laboratory on October 31 - November 14, 2018. This study used a Completely Randomized Design (CRD) 3 x 3 factorial pattern with 3 repetitions. Factor I liquid smoke concentration treatment of K1 (0%), K2 (5%), and K3 (10%). Factor II storage time of L1 (0 day), L2 (7 days), and L3 (14 days). Data were analyzed using Variation Analysis (ANOVA) if there were significant differences with the Duncan's New Multiple Range Test (DMRT). Observed variables were pH value, water holding capacity (WHC), cooking loss, and tenderness. The results of this research indicated there were interactions between treatments of pH values. PH value of K1 (6.83); K2 (6.11); K3 (6.1) and L1 (6.28); L2 (6.60); L3 L3 (6.13). Water holding capacity (WHC) K1 (36.20%); K2 (36.61%); K3 (34.44%); and L1 (36.02%); L2 (37.17%); L3 (34.06%). Cooking losses K1 (34.00%); K2 (37.22%); K3 (40.44%); and K1 (35.00%); K2 (37.44%); K3 (39.22%). Tenderness value K1 (4.81 kg / cm²); K2 (4.68 kg / cm²); K3 (4.37 kg / cm²); and L1 (4.58 kg / cm²); L2 (4.66 kg / cm²); L3 (4.62 kg / cm²). Bacterial TPC value K1 (50.50 x 10⁴ CFU / gram); K2 (31.83 x 10⁴ CFU / gram); K3 (20.16 x 10⁴ CFU / gram); and L1 (25.66 x 10⁴ CFU / gram); L2 (33.16 x 10⁴ CFU / gram); L3 (43.66 x 10⁴ CFU / gram). Based on the results of the study it can be concluded that the best use of liquid smoke is K3 (liquid smoke concentration 10%) and the best storage time is L1 (0 day storage time).

Keywords : Mutton, coconut shell liquid smoke, storage time, physical quality, TPC.

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