

# **PENGARUH LEVEL NANOKAPSUL KUNYIT TERHADAP KUALITAS FISIK DAN KIMIA DAGING ITIK HIBRIDA (*ANAS MOSCHA*)**

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## **INTISARI\*)**

Penelitian ini bertujuan untuk mengetahui pengaruh level nanokapsul kunyit pada kualitas fisik dan kimia daging itik hibrida (*Anas moscha*). Penelitian ini dilaksanakan pada 26 Maret- 5 Juni 2020 dengan tahap pertama yaitu pemeliharaan dan dilanjutkan tahap kedua uji Kualitas fisik dan kimia dilakukan di Laboratorium Peternakan Universitas Mercu Buana Yogyakarta Jl. Wates KM 10 Yogyakarta. Penelitian ini menggunakan itik hibrida sejumlah 20 ekor dipelihara selama 8 minggu. Rancangan percobaan yang digunakan dalam penelitian adalah rancangan acak lengkap (RAL) pola searah dengan 5 perlakuan dan 4 ulangan. Data yang diperoleh dianalisis dengan analisis variansi apabila pada penelitian ini terdapat perbedaan nyata dilanjutkan dengan uji Duncan's Multiple Range Test (DMRT). Perlakuan yang digunakan yaitu kontrol (Ransum basal)/RB+ 0% NK), P1(RB+1,5% NK), P2(RB+3% NK), P3(RB+4,5% NK), P4(RB+6% NK). Rerata nilai pH daging P0: 6,20; P1: 6,28; P2: 6,28; P3: 6,20; dan P4: 6,23. Rerata susuk masak daging P0: 37,79; P1: 40,83; P2: 38,84; P3: 43,99; dan P4: 42,91. Rerata daya ikat air P0: 73,37; P1: 74,98; P2: 74,98; P3: 72,49; dan P4: 71,06. Rerata keempukan daging P0: 0,95; P1: 3,10; P2: 0,71; P3: 0,83; dan P4: 0,73. Rerata kadar air P0: 79,87%; P1: 79,20%; P2: 84,13%; P3: 83,30%; dan P4: 78,18%. Rerata kadar protein P0: 21,06%; P1: 20,15%; P2: 23,458; P3: 24,536%; dan P4: 23,811%. Rerata kadar lemak P0: 1,27%; P1: 6,28%; P2: 6,28%; P3: 6,20%; dan P4: 6,23%. Rerata kadar abu P0: 1,06%; P1: 1,06%; P2: 1,30%; P3: 1,03%; dan P4: 1,02%. P0: 1,27%; P1: 6,28; P2: 6,28; P3: 6,20%; dan P4: 6,23%. Dari hasil penelitian ini disimpulkan bahwa penambahan nanokapsul kunyit dapat menurunkan daya ikat air tetapi tidak berpengaruh pada pH, susuk masak, keempukan, kadar air, kadar protein, kadar lemak dan kadar abu pada daging itik hibrida.

Kata kunci: Nanokapsul Kunyit, Kualitas Fisik, Kualitas Kimia, Itik Hibrida.

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## **THE EFFECT OF TURMERIC NANOCAPSULE LEVEL ON PHYSICAL AND CHEMICAL QUALITY OF HYBRID DUCK (*ANAS MOSCHA*) MEAT**

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### **ABSTRACT \*)**

This study aimed to determine the effect of turmeric nanocapsule level on the physical and chemical quality of hybrid duck (*Anas moscha*) meat. This research was conducted on March 26<sup>th</sup> - June 5<sup>th</sup>, 2020 with the first stage of maintenance and continued with the second phase of physical and chemical quality tests conducted at the Laboratory of Animal Husbandry at University of Mercu Buana Yogyakarta Jl. Wates KM 10 Yogyakarta. This study used 20 hybrid ducks kept for 8 weeks. The experimental design used in the study was a completely randomized design (CRD) oneway pattern with 5 treatments and 4 replications. Data obtained were analyzed by analysis of variance if there were significant differences in this study followed by Duncan's Multiple Range Test (DMRT). The treatments used were control (basal ration) / BR + 0% NC), P1 (BR + 1.5% NC), P2 (BR + 3% NC), P3 (BR + 4.5% NC), P4 (BR + 6% NC). The average pH value of meat P0: 6.20; P1: 6.28; P2: 6.28; P3: 6.20; and P4: 6.23. Average cooking losses for meat P0: 37.79; P1: 40.83; P2: 38.84; P3: 43.99; and P4: 42.91. Average water holding capacity P0: 73.37; P1: 74.98; P2: 74.98; P3: 72.49; and P4: 71.06. Mean meat tenderness P0: 0.95; P1: 3.10; P2: 0.71; P3: 0.83; and P4: 0.73. Average water content P0: 79.87%; P1: 79.20%; P2: 84.13%; P3: 83.30%; and P4: 78.18%. Average protein content P0: 21.06%; P1: 20.15%; P2: 23.458; P3: 24.536%; and P4: 23.811%. Average fat content P0: 1.27%; P1: 6.28%; P2: 6.28%; P3: 6.20%; and P4: 6.23%. Average ash content of P0: 1.06%; P1: 1.06%; P2: 1.30%; P3: 1.03%; and P4: 1.02%. P0: 1.27%; P1: 6.28; P2: 6.28; P3: 6.20%; and P4: 6.23%. The addition of turmeric nanocapsule decreased water holding capacity but could not influence of pH, cooking losses, tenderness, water content, protein, fat and ash content of hybrid duck meat.

**Keywords :** Turmeric Nanocapsule, Physical Quality, Chemistry Quality, Hybrid Duck

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