KUALITAS FISIK DAGING AYAM BROILER JANTAN YANG MENDAPATKAN PENAMBAHAN PROBIOTIK *Bacillus subtilis* DALAM RANSUMNYA

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INTISARI

Penelitian ini bertujuan untuk mengetahui kualitas fisik daging ayam broiler jantan yang mendapatkan penambahan probiotik bakteri *Bacillus subtilis* dalam ransumnya. Penelitian ini menggunakan 240 ekor ayam broiler jantan yang dikelompokkan dalam empat perlakuan. Setiap perlakuan terdiri dari 6 ulangan dan setiap ulangan terdiri dari 10 ekor ayam. Kelompok perlakuan terdiri dari 4 level probiotik *Bacillus subtilis*, yaitu: ransum basal tanpa penambahan probiotik (P1; pakan kontrol), ransum basal dengan penambahan 0,25 g/kg probiotik komersial A (P2), ransum basal dengan penambahan 0,50 g/kg probiotik komersial B (P3), serta ransum basal dengan penambahan 0,50 g/kg probiotik komersial C (P4). Pada akhir minggu ke-6, satu ekor ayam dengan bobot badan mendekati median dari setiap kelompok diambil, disembelih berdasarkan Syari'at Islam, dan kemudian sampel daging dada dikoleksi. Variabel kualitas fisik daging yang diamati meliputi nilai pH daging, kadar air, daya ikat air, susut masak, dan keempukan daging. Data yang diperoleh dianalisis statistik menggunakan Randomized Complete Block Design. Perbedaan respon yang nyata antar perlakuan diuji lanjut dengan menggunakan Duncan's new Multiple Range Test. Hasil penelitian menunjukkan bahwa penambahan probiotik dalam ransum tidak mempengaruhi derajat keasaman daging, kadar air, maupun nilai keempukan daging, namun penambahan probiotik komersial yang mengandung *B. subtilis* 0,50 g/kg pakan (P4) meningkatkan daya ikat air ($P<0,05$) dan menurunkan susut masak ($P<0,05$) daging dada ayam broiler jantan umur 42 hari.

Kata kunci: Ayam broiler, *Bacillus subtilis*, Kualitas fisik daging, Probiotik

MEAT PHYSICAL QUALITY OF MALE BROILER CHICKENS FED DIETS CONTAINING PROBIOTIC *Bacillus subtilis*

ABSTRACT

Objective of this study was to investigate the effects of dietary supplementation of probiotic *Bacillus subtilis* on meat physical quality of broiler chickens. A total number of 240 one-day-old male broiler chickens were divided into four dietary treatments, using 6 replications with 10 birds per replicate pen. The dietary treatments were: basal diet without probiotic supplementation (P1; control diet), basal diet mixed with 0.25 g/kg commercial probiotic A (P2), basal diet mixed with 0.50 g/kg commercial probiotic B (P3), and basal diet mixed with 0.50 g/kg commercial probiotic C (P4). On day 42, one bird per replicate pen with body weight close to the median of the pen was chosen and was slaughtered according to Islamic Law to collect breast meat samples. Variables of meat physical quality which measured were meat pH, moisture content, water-holding capacity, cooking loss, and meat tenderness. The data obtained were statistically analyzed using One-way Randomized Completely Block Design. The Duncan's new Multiple Range Test was used subsequently to analyze the significant results. The results showed that dietary supplementation of commercial probiotics containing 0.50 g/kg *B. subtilis* (P4) increased water-holding capacity ($P<0,05$) and reduced cooking loss ($P<0,05$). However, all dietary treatment did not influence pH value, moisture content, and meat tenderness of breast meat of 42 days old male broiler chickens.

Keywords: Broiler chickens, *Bacillus subtilis*, Meat physical quality, Probiotic