

## **PENGARUH FERMENTASI BAKTERI ASAM LAKTAT PADA PAKAN TERHADAP KUALITAS FISIK DAN KIMIA DAGING AYAM BROILER**

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### **INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh pakan fermentasi menggunakan bakteri asam laktat terhadap kualitas fisik dan kimia daging ayam broiler. Materi yang digunakan dalam penelitian ini adalah isolat bakteri asam laktat yang berasal dari saluran cerna ayam kampung sebagai inokulum fermentasi pakan ayam broiler strain Indian River. Pelaksanaan penelitian dibagi menjadi tiga tahap yaitu tahap persiapan pakan serta fermentasi, tahap pemeliharaan *in vivo* ayam broiler, dan tahap uji kualitas fisik dan kimia daging. Penelitian dilakukan dengan 6 level perlakuan yaitu P0 (100% pakan non fermentasi), P1 (75% P0 + 25% pakan fermentasi), P2 (50% P0 + 50% pakan fermentasi), P3 (25% P0 + 75% pakan fermentasi), P4 (100% pakan fermentasi), P5 (100% pakan pabrikan Widodo Makmur Unggas) dengan 6 flock sebagai ulangan pada setiap level perlakuan. Setiap *flock* terdapat 5 ekor ayam, sehingga total terdapat 180 ekor ayam. Air minum diberikan secara *Ad libitum* sedangkan pakan diberikan secara *restricted*. Perlakuan 6 level diberlakukan pada minggu pertama hingga akhir pemeliharaan. Ayam dipelihara selama 35 hari, kemudian ayam dipotong. Sampel daging bagian dada (*Pectoralis superficialis*) diambil untuk uji kualitas fisik dan kimia daging. Data dianalisis menggunakan *one way* ANOVA dan dilanjutkan dengan *Duncan's New Multiple Range Test* (DMRT). Hasil yang didapatkan bahwa penambahan fermentasi bakteri asam laktat pada pakan dapat menurunkan nilai kadar abu, kadar lemak dan kolesterol sedangkan Kadar air, kadar protein, pH, DIA, Keempukan, susut masak dan Warna berada dalam kisaran normal.

(Kata kunci: Ayam broiler, Pakan fermentasi, Bakteri asam laktat, Kualitas fisik daging, kualitas kimia daging)

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### **ABSTRACT**

This study aims to determine the effect of feed fermentation using lactic acid bacteria on the physical and chemical quality of broiler chicken meat. The material used in this study was isolates of lactic acid bacteria from the gastrointestinal tract of native chickens as an inoculum for feed fermentation of Indian River strain of broiler chicken. The implementation of the research was divided into three stages, namely the stage of feed preparation and fermentation, the stage of in vivo rearing of broiler chickens, and the stage of testing the physical and chemical quality of the meat. The study was conducted with 6 levels of treatment, namely P0 (100% non-fermented feed), P1 (75% P0 + 25% fermented feed), P2 (50% P0 + 50% fermented feed), P3 (25% P0 + 75% fermented feed), P4 (100% fermented feed), P5 (100% poultry feed manufacturer Widodo Makmur) with 6 flock as repetitions at each treatment level. Each flock contains 5 chickens, so there were a total of 180 chickens. Drinking water was given ad libitum while feed was given on a restricted basis. The 6-level treatments were applied in the first week until the end of maintenance. Chickens are reared for 35 days, then the chickens were slaughtered. The breast meat sample (*Pectoralis superficialis*) was taken for further test for physical and chemical quality of the meat. Data were analyzed using one way ANOVA and continued with Duncan's New Multiple Range Test (DMRT). The results showed that the addition of lactic acid bacterial fermented feed reduce the value of ash content, fat content and cholesterol while the water content, protein content, pH, DIA, tenderness, cooking loss and color were in the normal range.

(Keywords: Broiler chicken, Fermented feed, Lactic acid bacteria, Physical quality of meat, chemical quality of meat)