

PENGARUH PERBEDAAN ENERGI PADA ISOPROTEIN PAKAN TERHADAP PENAMPILAN DUA STRAIN AYAM BROILER

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INTISAM

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan energi pada isoprotein pakan dan *strain* terhadap penampilan produksi ayam broiler dan *income over feed and chick cost*. Sebanyak 72 ekor DOC broiler *unsexed* dari 2 *strain* yaitu Lohmann (LH) dan Arbor Acres (AA) masing-masing 36 ekor dikelompokkan secara acak dalam 3 kelompok perlakuan pakan berkadar protein 18% dengan energi 2800, 3000, 3200 kcal ME/kg, setiap kelompok terdiri dari 3 replikasi dan setiap replikasi terdiri dari 4 ekor. Penelitian ini dilaksanakan selama 7 minggu dengan pakan dan air minum diberikan secara *ad libitum*. Parameter yang diamati adalah rerata pertambahan berat badan, rerata konsumsi pakan, konversi pakan dan *income over feed and chick cost*. Data yang diperoleh dianalisis statistik dengan Analisis Variansi Rancangan Acak Lengkap Pola Faktorial. Hasil analisis statistik menunjukkan bahwa perbedaan *strain* tidak berpengaruh secara nyata terhadap rerata pertambahan berat badan, rerata konsumsi pakan tetapi berpengaruh nyata ($P < 0,05$) terhadap konversi pakan. Sedangkan perbedaan energi pakan dan interaksi antara *strain* dan energi pakan berpengaruh tidak nyata terhadap rerata pertambahan berat badan, konsumsi pakan dan konversi pakan. Rerata pertambahan berat badan yang diperoleh sebesar 2279,85 g; 2284,63 g; 2288,80 g untuk *strain* Lohmann dan *strain* Arbor Acres sebesar 2286,45 g; 2404,34 g; 2512,11 g. Konsumsi pakannya 5009,08 g; 4994,83 g; 4960,92 g untuk *strain* Lohmann dan 5019,92 g; 5003,33 g; 4954,92 g untuk *strain* Arbor Acres. Sedangkan konversi pakan untuk *strain* Lohmann diperoleh sebesar 2,20; 2,19; 2,17 dan sebesar 2,20; 2,08; 1,98 untuk *strain* Arbor Acres. Keuntungan yang diperoleh berdasar *income over feed and chick cost* sebesar: Rp 5624,76; Rp 5375,48; Rp 5100,25 untuk *strain* Lohmann dan sebesar Rp 5341,34; Rp 5889,75; Rp 6330,04 untuk *strain* Arbor Acres masing-masing pada masing-masing pakan perlakuan. Dari penelitian ini dapat disimpulkan bahwa rerata pertambahan berat badan, konsumsi pakan dan konversi pakan tidak dipengaruhi oleh perbedaan energi pakan. Sedangkan perbedaan *strain* hanya berpengaruh secara nyata ($P < 0,05$) pada konversi pakan tetapi tidak berpengaruh secara nyata terhadap rerata pertambahan berat badan dan konsumsi pakan.

(Kata kunci : Ayam Broiler, *Strain*, Energi Pakan, Penampilan Produksi)

THE EFFECT OF ENERGY LEVEL IN ISOPROTEIN DIETS ON TWO STRAINS BROILER CHICKEN PERFORMANCE

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ABSTRACT

This experiment was carried out to observe the effect of energy level in isoprotein diet and strain on performance production of broiler chicken and income over feed and chick cost. The experiment used 72 day-old-broiler chickens unsexed consist of two strains (Lohmann and Arbor Acres), each strain contains 36 chickens that they were divided randomly into three treatment diets with 18% crude protein and energy levels 2800; 3000; 3200 kcal ME/kg. Each treatment consists of three replications with four birds each. This experiment held for 7 weeks with feed and water are provided *ad libitum*. Collected data were body weight gain, feed consumption, feed conversion and income over feed and chick cost. The data were statistically analysed by model of completely randomised design of 2 x 3 factorial. The result of statistical analysis showed that the different strain was not significantly on body weight gain and feed consumption, but significantly different ($P < 0.05$) on feed conversion. Energy level on diet and their interaction were not significantly different on body weight gain, feed consumption and feed conversion. The body weight gain was obtained 2279.85 g; 2284.63 g; 2288.80 g on Lohmann strain and Arbor Acres strain was obtained 2286.45 g; 2404.34 g; 2512.11 g. Feed consumption on Lohmann strain was obtained 5009.08 g; 4994.83 g; 4960.92 g and Arbor Acres strain was obtained 5019.92 g; 5003.33 g; 4954.92 g. While feed conversion was obtained 2.20; 2.19; 2.17 on Lohmann strain and Arbor Acres strain was obtained 2.20; 2.08; 1.98. The profit was calculated upon the basis of income over feed and chick cost, the result was obtained Rp 5,624.76; Rp 5,375.48; Rp 5,100.25 on Lohmann strain and strain Arbor Acres was obtained Rp 5,341.34; Rp 5,889.75; Rp 6,330.04 on each of three treatment diets. It was concluded that the energy level diet was not significantly on body weight gain, feed consumption and feed conversion. The different strain was significantly different ($P < 0.05$) on feed conversion but not significantly on body weight gain and feed consumption.

(Key words: Broiler Chicken, Strain, Energy Diet, Performance Production)