

PENGARUH PENGGUNAAN *DRIED DISTILLERS GRAIN WITH SOLUBLE* (DDGS) PADA RANSUM BROILER BERENERGI RENDAH TERHADAP KARKAS, LEMAK ABDOMINAL DAN HATI AYAM BROILER

**Fathimah Zahra
07/253410/PT/5320**

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan *Dried Distillers Grain with Soluble* (DDGS) pada pakan dengan kandungan energi yang rendah terhadap berat dan persentase karkas, lemak abdominal, dan hati ayam broiler. Penelitian ini menggunakan DOC broiler strain Lohmann sebanyak 125 ekor. Ayam broiler dikelompokkan ke dalam 5 level perlakuan dan dibagi menjadi 25 kandang dengan replikasi 5 ekor masing-masing kandang. Level perlakuan yang diberikan adalah 0, 20, 30, 40, dan 50% dari total pakan. Penggunaan DDGS dilakukan hingga umur 35 hari. Setelah umur 35 hari, dilakukan penimbangan berat potong dan pematangan pada 25 ekor ayam broiler, kemudian penimbangan berat karkas, lemak abdominal, dan hati, serta perhitungan persentasenya. Penelitian ini menggunakan Rancangan Acak Lengkap pola searah (*Complete Randomized Design*). Apabila terjadi perbedaan yang nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa penggunaan DDGS berpengaruh nyata terhadap berat dan persentase karkas, berat dan persentase lemak abdominal, dan berat hati. Berat karkas yang diperoleh adalah $625,40 \pm 55,38$, $608,60 \pm 55,61$, $568,20 \pm 123,87$, $422,80 \pm 55,97$ dan $401,80 \pm 47,53$ gram, persentase karkas $61,79 \pm 1,83$, $61,70 \pm 2,78$, $60,17 \pm 2,57$, $57,19 \pm 2,22$ dan $56,68 \pm 3,61\%$, berat lemak abdominal $15,60 \pm 3,28$, $15,00 \pm 4,00$, $13,20 \pm 5,63$, $5,60 \pm 3,28$ dan $4,20 \pm 2,86$ gram, persentase lemak abdominal $1,56 \pm 0,42$, $1,53 \pm 0,46$, $1,37 \pm 0,46$, $0,77 \pm 0,47$, dan $0,61 \pm 0,42\%$, serta berat hati $22,20 \pm 2,94$, $21,80 \pm 3,96$, $20,80 \pm 0,89$, $15,80 \pm 2,77$ dan $15,80 \pm 1,92$ gram. Penggunaan DDGS hingga level 30% tidak berpengaruh terhadap berat karkas dan hati, tetapi penggunaan level 40% dapat menurunkan berat dan persentase karkas yang diikuti dengan penurunan lemak abdominal dan hati ayam broiler.

Kata kunci: *Dried Distillers Grain with Soluble* (DDGS), Ayam broiler, Karkas, Lemak abdominal, Hati

THE EFFECT OF USING DRIED DISTILLERS GRAIN WITH SOLUBLE (DDGS) WITH LOWER ENERGY IN FEED ON CARCASS, ABDOMEN FAT AND LIVER OF BROILER

Fathimah Zahra
07/253410/PT/5320

ABSTRACT

An experiment was conducted to find out the effect of use of Dried Distillers Grain with Soluble (DDGS) with low energy diet on carcass, abdomen fat and liver of broiler throughout 35 days growing period. This experiment was conducted using 125 one day old chicks. The birds were randomly divided into five dietary treatments. Each dietary treatment was assigned to five replicate pens of five chicks. Diets were contain of 0, 20, 30, 40 and 50% DDGS. At 35-days old, 25 birds were weighted and slaughtered, then the carcass, abdomen fat and liver were weighted. This experiment used the Complete Randomized Design (CRD) and the data were analyzed by Oneway Anova. The Duncan's New Multiple Range Test (DMRT) used if there were the significant differences. There were significant effects of DDGS level on carcass weight and percentage, abdomen fat and percentage, and liver weight. Carcass weight of broiler chicken of R 0, R 20, R 30, R 40 and R 50 were 625.40 ± 55.38 , 608.60 ± 55.61 , 568.20 ± 123.87 , 422.80 ± 55.97 and 401.80 ± 47.53 , respectively, carcass percentage were 61.79 ± 1.83 , 61.70 ± 2.78 , 60.17 ± 2.57 , 57.19 ± 2.22 and $56.68 \pm 3.61\%$, respectively, abdomen fat weight were 15.60 ± 3.28 , 15.00 ± 4.00 , 13.20 ± 5.63 , 5.60 ± 3.28 and 4.20 ± 2.86 gram, respectively, abdomen fat percentage were 1.56 ± 0.42 , 1.53 ± 0.46 , 1.37 ± 0.46 , 0.77 ± 0.47 , and $0.61 \pm 0.42\%$, respectively, and liver weight were 22.20 ± 2.94 , 21.80 ± 3.96 , 20.80 ± 0.89 , 15.80 ± 2.77 and 15.80 ± 1.92 gram. The use of DDGS up to 30% level could maintain the carcass, but the use of 40% DDGS level decreased carcass weight and percentage, as well as the abdomen fat and liver.

Key words: Dried Distillers Grain with Soluble (DDGS), Broiler chicken, Carcass, Abdomen fat, Liver