

**PENGARUH PENGGUNAAN *POLLARD* DAN ASAM AMINO DALAM PAKAN TERHADAP KADAR LEMAK HATI, KOLESTEROL DAN TRIGLISERIDA PLASMA DARAH AYAM PETELUR FASE *GROWER***

Ari Astuti

98/122557/PT/03700

**INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan *pollard* dan penambahan asam amino (metionin, lisin, treonin dan triptofan) terhadap kadar lemak hati dan kolesterol serta trigliserida plasma darah. Penelitian ini menggunakan 216 ekor ayam *layer* fase *grower* yang ditempatkan secara acak ke dalam 12 kandang yang dibagi menjadi 4 kelompok perlakuan, masing-masing kelompok perlakuan terdiri dari 3 ulangan, untuk setiap ulangan menggunakan 18 ekor ayam. Kelompok kontrol R0 (tanpa *pollard* + tanpa tambahan asam amino), kelompok perlakuan R1 (10% *pollard* + AA sebanyak AA kontrol), kelompok perlakuan R2 (20% *pollard* + AA sebanyak AA kontrol), kelompok perlakuan R3 (30% *pollard* + AA sebanyak AA kontrol). Rasio pakan yang digunakan adalah isonitrogen dan isokalori (PK 16% dan ME 2800 kcal/kg). Data hasil penelitian berupa rerata kadar lemak hati(%), kadar kolesterol(mg/dl) dan trigliserida(mg/dl) dalam plasma darah, serta berat lemak abdominal(g). Analisis data menggunakan analisis variansi dari rancangan acak lengkap pola searah(CRD), bila terdapat perbedaan dilanjutkan dengan uji beda mean (DMRT). Hasil penelitian menunjukkan bahwa penggunaan *pollard* sampai dengan 30% dan penambahan asam amino kritis tidak menunjukkan perbedaan yang nyata ( $P > 0,05$ ) terhadap rerata berat lemak abdominal, kadar kolesterol dalam plasma darah, tetapi berpengaruh nyata ( $P < 0,05$ ) terhadap persentase lemak hati dan kadar trigliserida.

Kata kunci: Ayam *layer*, *Pollard*, Asam amino kritis, Lemak hati, Kolesterol, Trigliserida

**THE EFFECT OF USING POLLARD AND AMINO ACIDS ON LIVER FAT, CHOLESTEROL AND TRIGLYCERIDES CONTENT IN BLOOD PLASMA OF LAYER CHICKENS DURING GROWER PERIOD**

**Ari Astuti**  
**98/122557/PT/03700**

**ABSTRACT**

This experiment was conducted to determine the effect of pollard and amino acids (methionine, lysine, threonine and tryptophan) in the diets on liver fat, cholesterol and triglycerides content in the blood plasma. Two hundreds and sixteen of layer Lohman were randomly into four ration treatments, in three replications with 18 birds each. The diets treatments were R0 dietary without pollard + amino acid (AA), R1 (10% pollard + AA equal R0 total of AA control), R2 (20% pollard + AA) and R3 (30% pollard + 1 control AA), respectively. The diet was made isonitrogenous and iso calory (16% crude protein and 2800 Mcal/kg ME). Data collected in this experiment were those level of liver fat content (%), abdominal fat weight (g), cholesterol content (mg/dl) and triglycerides content (mg/dl) in blood plasma. The collected data were analyzed by one way classification of variance analyses (CRD), followed by testing the significant means by Duncan's Multiple Range Test (DMRT). The result indicated that the used of pollard up to 30% level and amino acids had no significant differences ( $P > 0.05$ ) on liver weight and differences on cholesterol in the blood plasma, but had significant ( $P < 0.05$ ) on liver fat and triglycerides content. It was concluded that the used of pollard amino acids in the diet resulted decrease liver and abdominal fat but increase cholesterol and triglycerides of blood plasma.

**Key words:** Layer chickens, Pollard, Amino acids, Liver fat, Cholesterol, Triglycerides