

## INTISARI

### **PENGARUH PEMBERIAN TEPUNG KULIT PISANG (*Musa sp.*) TERHADAP LAJU KONVERSI PAKAN, KADAR TRIGLISERID, KOLESTEROL TOTAL, HDL, DAN LDL DARAH AYAM BROILER**

**Kandita Miharja**

Kulit pisang merupakan salah satu limbah yang dapat dimanfaatkan menjadi alternatif pakan yang cukup potensial sebagai campuran pakan bagi ayam broiler di Indonesia. Kulit pisang memiliki kandungan protein, karbohidrat, mineral, zat antioksidan dan fitoestrogen. Tujuan penelitian ini adalah untuk mengetahui efek pemberian kulit pisang terhadap laju konversi pakan, kadar lemak, dan kolesterol total darah ayam broiler.

Penelitian ini dilakukan di kandang percobaan UP2KH FKH UGM. Penelitian ini menggunakan 50 ekor ayam broiler strain CP 707 yang berumur 3 minggu yang dibagi menjadi 5 kelompok masing – masing 10 ekor selama 5 minggu. Kelompok K (Kontrol) diberi pakan komersial 100%, kelompok P-1 (perlakuan 1) diberi pakan komersial 90%+10% tepung kulit pisang, kelompok P-2 (perlakuan 2) diberi pakan komersial 80%+20% tepung kulit pisang, kelompok P-3 (perlakuan 3) diberi pakan komersial 70%+30% tepung kulit pisang, kelompok P-4 (perlakuan 4) diberi pakan komersial 60%+40% tepung kulit pisang. Pemberian pakan dilakukan 2 kali sehari selama 2 minggu. Penimbangan berat badan dilakukan setiap minggu selama 5 minggu untuk mengetahui laju konversi pakan. Pengambilan sampel serum dilakukan pada minggu ke-5 menggunakan spuit 3 cc dan tabung *ependorf* melalui vena *Brachialis*. Sampel serum akan diuji kadar HDL, LDL, dan trigliserida. Data dari laju konversi pakan dan sampel serum yang diperoleh dianalisis secara statistika menggunakan uji ANOVA.

Hasil pengamatan menunjukkan bahwa rata-rata laju konversi pakan K ( $1.65 \pm 0.14$ ), P-1 ( $1.57 \pm 0.20$ ), P-2 ( $1.68 \pm 0.12$ ), P-3 ( $1.67 \pm 0.16$ ), dan P-4 ( $1.77 \pm 0.27$ ); Rataan kolesterol total K ( $123.73 \pm 20.01$ ), P-1 ( $102.03 \pm 26.05$ ), P-2 ( $125.63 \pm 10.99$ ), P-3 ( $108.06 \pm 5.12$ ), dan P-4 ( $124.67 \pm 41.34$ ); Rataan LDL K ( $87.57 \pm 22.7$ ), P-1 ( $78.87 \pm 19.9$ ), P-2 ( $84.13 \pm 15.1$ ), P-3 ( $81.4 \pm 9.01$ ), dan P-4 ( $94.9 \pm 33.47$ ); Hasil tersebut menyatakan tidak ada perbedaan ( $P > 0,05$ ) antarkelompok perlakuan. Sedangkan untuk rata-rata HDL K ( $34.73 \pm 6.7$ ), P-1 ( $13.47 \pm 9.5$ ), P-2 ( $21.63 \pm 8.7$ ), P-3 ( $31.4 \pm 7.89$ ), dan P-4 ( $25.87 \pm 6.4$ ); Rataan trigliserid K ( $61.23 \pm 6.9$ ), P-1 ( $105.73 \pm 40.86$ ), P-2 ( $113.67 \pm 29.01$ ), P-3 ( $136.63 \pm 44.94$ ), dan P-4 ( $393.33 \pm 322.3$ ). Hasil tersebut menyatakan ada perbedaan ( $P < 0,05$ ) antarkelompok perlakuan. Dengan demikian dapat disimpulkan bahwa kulit pisang dapat digunakan sebagai campuran pakan alternatif pada pakan komersil.

Kata kunci : *Broiler, Kulit pisang, FCR, Trigliserid, Kolesterol total*

## ABSTRACT

### **EFFECT OF BANANA PEEL FLOUR (*Musa sp.*) TO FEED CONVERSION RATE, TRIGLISERID CONTENT, TOTAL CHOLESTEROL, HIGH DENSITY LIPOPROTEIN, AND LOW DENSITY LIPOPROTEIN BROILER CHICKEN BLOOD**

**Kandita Miharja**

Banana peel is one of the waste which can be a potential alternative animal feed to become ingredient of commercial feed for broiler chicken in Indonesia. Banana peel contains protein, carbohydrate, mineral, antioxidant and phytoestrogen. The purpose of this research is to analyze the effect of feeding banana peel towards feed conversion rate, fat content, and total blood cholesterol broiler chicken.

The research was conducted at the broiler coop trail UP2KH FKH UGM. The method was using treatment for 5 weeks with 50 chicken broiler strains CP 707 3 weeks old divided into five groups, each group consist of 10 broiler. Control group (K) being fed with commercial feed 100% . Treatment 1 group (P-1) fed with commercial feed 90% mixed with 10% banana peel flour. Treatment 2 group (P-2) fed with commercial feed 80% mixed with 20% banana peel flour. Treatment 3 group (P-3) fed with commercial feed 70% mixed with 30% banana peel flour. Treatment 4 group (P-4) being fed with commercial feed 60% mixed with 40% banana peel flour. Feed mixture was given every 2 times a days for 2 weeks. Weight measured every week for 5 weeks to determine FCR. Blood sampling was collected on week 5 using 3 cc syringe and eppendorf tube through *Brachialis* vein. The parameter for blood serum test were total cholesterol, HDL, LDL, and triglyceride. Feed conversion rate and sample serum was analyzed statistically with ANOVA test.

The results showed average of FCR for K(1.65±0.14), P-1(1.57±0.20), P-2(1.68±0.12), P-3(1.67±0.16), and P-4(1.77 ± 0.27); The average number of total cholesterol for K(123.73±20.01), P-1(102.03±26.05), P-2(125.63±10.99), P-3(108.06±5.12), and P-4(124.67±41.34); The average number of LDL for K(87.57±22.7), P-1(78.87±19.9), P-2(84.13±15.1), P-3(81.4±9.01), and P-4(94.9±33.47); ANOVA analysis results, there were no difference (P>0,05) between the treatment comparisons. While average number of HDL for K(34.73±6.7), P-1(13.47±9.5), P-2(21.63±8.7), P-3(31.4±7.89), and P-4(25.87±6.4); The average number of triglyceride for K(61.23 ± 6.9), P-1(105.73 ± 40.86), P-2(113.67 ± 29.01), P-3(136.63 ± 44.94), and P-4(393.33 ± 322.3); ANOVA analysis results, there were difference (P<0,05) between the control and treatment comparisons It has concluded that feeding banana peel was able to become a ingredient of commercial feed.

**Key words :** *Broiler, Banana peel , FCR, Triglycerid, Total cholesterol*