

**PENGARUH SUBSTITUSI SEBAGIAN PAKAN KOMERSIAL DENGAN
KONSENTRAT SUMBER PROTEIN TERHADAP KINERJA AYAM
JANTAN RAS PETELUR UMUR 22 SAMPAI 50 HARI**

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh substitusi sebagian pakan komersial dengan konsentrat sumber protein (Permata-Mix) terhadap kinerja ayam jantan ras petelur umur 22 sampai 50 hari. Seratus delapan puluh ekor ayam jantan ras petelur umur 22 hari dibagi secara acak ke dalam tiga kelompok perlakuan pakan: P0, P1 dan P2 dengan perbandingan pakan komersial: konsentrat sumber protein berturut-turut 100:0, 50:50 dan 25:75. Masing-masing perlakuan diberikan ulangan sebanyak tiga kali. Respon variabel data yang diamati meliputi konsumsi pakan, konsumsi energi, konsumsi protein, penambahan bobot badan, konversi pakan *feed cost per gain* dan *income over feed cost*. Data dianalisis statistik menggunakan analisis variansi Rancangan Acak Lengkap Pola Searah. Hasil penelitian menunjukkan bahwa substitusi sebagian pakan komersial dengan konsentrat sumber protein tidak berpengaruh terhadap rerata konsumsi pakan dan konsumsi protein. Adapun substitusi sebagian pakan komersial dengan konsentrat sumber protein menurunkan konsumsi energi ($P < 0,05$) dan penambahan bobot badan ($P < 0,05$) serta meningkatkan konversi pakan ($P < 0,05$). Penelitian ini dapat disimpulkan bahwa substitusi sebagian pakan komersial dengan konsentrat sumber protein hingga level 25:75 tidak memberikan keuntungan secara ekonomi.

Kata kunci: Substitusi sebagian, Konsentrat sumber protein, Ayam jantan ras petelur

THE EFFECTS OF PARTIAL SUBSTITUTION OF COMMERCIAL FEED WITH PROTEIN CONCENTRATE ON PERFORMANCE OF 22 TO 50 DAYS OLD OF MALE LAYER CHICKENS

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ABSTRACT

This research was conducted to evaluate the effect of partial substitution commercial feed with protein concentrate (Permata-Mix) on performance of 22 to 50 days old of male layer chickens. One hundred and eighty of 22 to 50 days old of male layer chickens were divided into three groups of dietary treatments: P0, P1 and P2 with a ratio of commercial feed: protein concentrate 100:0, 50:50 and 25:75. Each treatment consisted of three replicates. The variables observed were feed consumption, energi consumption, protein consumption, body weight gain, feed conversion, feed cost per gain and income over feed cost. The data were statically analyzed using One Way ANOVA. The results showed that partial substitution of commercial feed with protein concentrate did not influence feed consumption and protein consumption. However, partial substitution with the ratio of 25:75 reduce energi consumption ($P < 0.05$) and body weight gain ($P < 0.05$) and increase feed conversion ($P < 0.05$). it can be concluded that partial substitution of commercial feed with protein concentrate do not profitable.

Keywords: Partial substitution, Protein concentrated, Male layer chickens