

ABSTRAK

PENGARUH PEMBERIAN ZINC SULFAT DAN INDUKSI TESTOSTERON TERHADAP BOBOT BADAN AYAM LAYER JANTAN (*Gallus domesticus*)

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Pada masa kini, ayam petelur jantan digunakan untuk menghasilkan daging dalam rangka mengejar pemenuhan protein hewani Indonesia yang masih rendah. Keuntungan dari ayam ini yaitu pertumbuhan yang cukup cepat. Kecepatan pertumbuhan dapat diukur melalui pertambahan bobot badan pada saat tertentu, terhadap bobot badan pada minggu sebelumnya. Hormon testosteron dapat meningkatkan laju pertambahan berat badan. *Zinc* sulfat juga berperan penting pada proses metabolisme protein dan karbohidrat, pertumbuhan dan reproduksi.

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian *zinc* sulfat dan testosteron terhadap bobot badan ayam petelur jantan (*Gallus domesticus*) melalui metode *Mann-Whitney* menggunakan 50 DOC layer jantan yang dibagi menjadi 2 kelompok perlakuan yaitu *zinc* sulfat dan testosteron. Larutan *zinc* diberikan secara per oral sebanyak 0,2 ml dan testosteron diberikan sebanyak 0,1 ml secara subkutan setiap hari selama 35 hari dan dilakukan koleksi sampel setiap minggunya dengan menimbang bobot masing-masing hewan lalu dihitung rata-rata bobot per kelompok.

Hasil penelitian analisis statistik menunjukkan pemberian *zinc* sulfat, testosteron dan kontrol tidak ada perbedaan yang signifikan ($p > 0,05$) terhadap peningkatan bobot badan. Hasil penelitian ini dapat disimpulkan bahwa pemberian *zinc* sulfat dan induksi testosteron pada DOC layer jantan mampu meningkatkan bobot.

Kata kunci: Ayam layer jantan, bobot badan, *zinc* sulfat, testosteron

ABSTRACT

THE EFFECT OF ZINC SULFATE AND TESTOSTERONE INDUCTION ON MALE LAYER CHICKEN'S WEIGHT (*Gallus domesticus*)

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At the present, male layer chicken are used to produce meat in order to pursue the fulfillment of Indonesia's low animal protein. The advantage of this chicken is a fairly fast growth. Growth speed can be measured by the increase in body weight at a certain time, against body weight in the previous week. The hormone testosterone can increase the rate of weight gain. *Zinc* sulfate also plays an important role in the process of protein and carbohydrate metabolism, growth and reproduction.

This study aims to determine the effect of *zinc* sulfate and testosterone on body weight of male layer chicken (*Gallus domesticus*) through the Mann-Whitney method using 50 male DOC into 2 treatment groups, namely *zinc* sulfate and testosterone. *Zinc* solution was given orally as much as 0.2 ml and testosterone was given as much as 0.1 ml subcutaneously every day for 35 days and the sample was collected every week by weighing the weight of each animal and then the average weight per group was calculated.

The results of statistical analysis showed that zinc sulfate, testosterone and control were not significantly different ($p > 0.05$) on the increase in body weight. The results of this study concluded that giving zinc sulfate and testosterone to male DOC layers was able to increase body weight and there was a difference between the group given zinc sulfate compared to the testosterone-induced group.

Keywords: Male layer chicken, body weight, *zinc* sulfate, testosterone