ABSTRAK

EFEK PEMBERIAN ZINC SULFAT TERHADAP KADAR TESTOSTERON FESES BURUNG KENARI *(Serinus canaria)*

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Pada masa kini, minat untuk memelihara burung berkicau sebagai bentuk kegemaran semakin berkembang di kalangan masyarakat sehingga berkembang pula kebiasaan kontes burung kicau di berbagai wilayah di Indonesia. Dengan adanya kegiatan kontes ini, harga burung kicau unggulan yang menjadi juara dan kualitas suaranya baik menjadi melambung tinggi. Kicauan pada burung dikendalikan oleh hormon testosteron yang diproduksi di sel leydig. Zinc berperan sebagai aromatase inhibitor sehingga secara tidak langsung dapat meningkatkan kadar testosteron di dalam tubuh.

Penelitian ini mengkaji efek pemberian zinc sulfat terhadap kadar testosteron feses burung kenari (*Serinus canaria*) melalui metode non-invasif menggunakan 4 burung kenari jantan jenis Yorkshire yang dibagi menjadi 2 kelompok yaitu kelompok perlakuan dan kontrol. Pada kelompok perlakuan, burung kenari diberi 0,009 mg/ekor zinc sulfat sedangkan kelompok kontrol diberi akuades selama 21 hari dan dilakukan pengambilan sampel feses diakhir penelitian. Sampel feses diekstraksi dan kadar testosteronnya diukur menggunakan ELISA kompetitif.

Hasil penelitian ini diperoleh rerata kadar testosteron feses kelompok perlakuan 0,343 ± 0,003 ng/g feses kering dan kontrol 0,219 ± 0,042 ng/g feses kering. Analisis statistik menunjukkan pemberian zinc sulfat 0,009 mg/ekor per hari berpengaruh signifikan ($p<0,05$) terhadap kadar testosteron feses burung kenari jantan. Hasil penelitian ini dapat disimpulkan bahwa pemberian zinc sulfat dapat meningkatkan kadar testosteron burung kenari.

Kata kunci: Burung kenari, zinc, testosteron, feses, ELISA

ABSTRACT

EFFECT OF ZINC SULFATE ADMINISTRATION ON CANARY *(Serinus canaria)* FECAL TESTOSTERONE LEVEL

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At the present, the interest in keeping songbirds as a favourite is growing among the community so that the habit of songbird contests has also developed in various regions in Indonesia. With the existence of this contest, the price of the superior songbird who won the contest and the good quality has soared. Song in birds is controlled by the hormone testosterone, which is produced in leydig cells. Zinc acts as an aromatase inhibitor so that it can indirectly increase testosterone levels in the body.

This study examined the effect of zinc sulfate on fecal testosterone levels of canaries (*Serinus canaria*) through a non-invasive method using 4 male canaries of the Yorkshire type, which were divided into 2 groups, the treatment and control groups. In the treatment group, canaries were given 0.009 mg/head of zinc sulfate while the control group was given aquadest for 21 days and feces were taken at the end of the study. Stool samples were extracted and their testosterone levels measured using competitive ELISA.

The results of this study obtained that the fecal testosterone level of the treatment group was 0.343 ± 0.003 ng/g dry feces and the control group was 0.219 ± 0.042 ng/g dry feces. Statistical analysis showed that zinc sulfate was given 0.009 mg/head per day significantly ($p < 0.05$) on male canary feces testosterone levels. The results of this study concluded that zinc sulfate can increase testosterone levels in canaries.

Keywords: Canary, zinc, testosterone, feces, ELISA