

**PENGARUH WARNA CAHAYA TERHADAP PERKEMBANGAN
UKURAN SALURAN REPRODUKSI DAN TESTIS BURUNG PUYUH
(*Coturnix coturnix japonica*) JANTAN UMUR 2-8 MINGGU**

WIJI WIGUNA

NIM 200220066

INTISARI*

Penelitian ini bertujuan untuk mengetahui pengaruh warna cahaya terhadap perkembangan ukuran saluran reproduksi dan testis burung puyuh jantan. Penelitian ini dilaksanakan pada tanggal 31 Januari-15 Maret 2022. Materi yang digunakan yaitu burung puyuh jantan sebanyak 99 ekor berumur 2 minggu. Variabel yang diamati meliputi panjang, berat dan volume saluran reproduksi dan testis. Penelitian ini menggunakan rancangan acak lengkap (RAL) menggunakan pola faktorial 3x4x3. Data yang diperoleh dianalisis dengan menggunakan *Analysis of Variance* (ANOVA) dan apabila terdapat perbedaan yang nyata, maka analisis akan dilanjutkan dengan uji *Duncan Multiple Range Test* (DMRT). Perlakuan yang diberikan yaitu Faktor A = pemberian warna cahaya berbeda yang terdiri dari lampu LED warna pijar, merah dan Faktor B = perlakuan umur potong yaitu umur 2, 4, 6 dan 8 minggu. Hasil penelitian menunjukkan pemberian warna cahaya dan umur potong berpengaruh nyata ($P < 0,05$) terhadap panjang saluran reproduksi dan berat testis, serta berpengaruh tidak nyata ($P > 0,05$) terhadap berat saluran reproduksi, volume saluran reproduksi, diameter dan volume testis. Berdasarkan hasil penelitian yang telah dilakukan, dapat disimpulkan bahwa pemberian warna cahaya merah pada puyuh jantan umur 2 sampai 8 minggu memberikan peningkatan terhadap panjang saluran reproduksi dan berat testis.

Kata kunci : Warna cahaya, organ, reproduksi, puyuh jantan.

*) Intisari Skripsi Mahasiswa, Program Studi Peternakan, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta, 2022.

**THE EFFECT OF LIGHT COLOR ON REPRODUCTION DUCT AND
TESTICLE SIZE DEVELOPMENT OF MALE QUAIL (*Coturnix coturnix
japonica*) OF 2-8 WEEKS OLD**

WIJI WIGUNA

NIM 200220066

ABSTRACT*

This study aims to determine the effect of light color on the development of the size of the reproductive tract and testes of male quail. This research was conducted on January 31-15 March 2022. The material used was 99 male quails aged 2 weeks. The variables observed included the length, weight and volume of the reproductive tract and testes. This study used a completely randomized design (CRD) using a 3x4x3 factorial pattern. The data obtained were analyzed using the Analysis of Variance (ANOVA) and if there was a significant difference, the analysis would be continued with the Duncan Multiple Range Test (DMRT). The treatment given was Factor A = giving different light colors consisting of incandescent, red LED lights and Factor B = treatment of cutting ages, namely 2, 4, 6 and 8 weeks. The results showed that the provision of light color and cutting age had a significant effect ($P < 0,05$) on the length of the reproductive tract and testes weight, and had no significant effect ($P > 0,05$) on the weight of the reproductive tract, the volume of the reproductive tract, the diameter and volume of the testes. . Based on the results of the research that has been done, it can be concluded that giving red light color to male quail aged 2 to 8 weeks gave an increase in the length of the reproductive tract and the weight of the testes.

Keywords: Light color, organs, reproduction, male quail.

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