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Effect of Different Rest Period Regimes During Molting on Production Performance and Egg Quality of Layers

Muhammad Yousaf, Farhan Farrukh, Muhammad Sharif

University of Agriculture Faisalabad, Inst. of Animal and Dairy Sciences, Pakistan

Abstract

Present study was conducted to check effect of various rest period regimes during molting period on post-molt production performance of layers in cage system. The study was conducted at Raja Muhammad Akram Animal Nutrition Research Center, University of Agriculture Faisalabad Pakistan. One hundred and twenty commercial layers 85 weeks of age were divided into five treatments (T1, T2, T3, T4, and T5) with three replications in each (8 layers/replicate). Commercial feed having CP 16 %, ME 2750 Kcal kg^{-1} was offered to layers while water was provided *ad libitum* throughout experimental period. Treatment T1 was served as control. Treatment T2 was offered 40 grams feed throughout the molting period, while treatments T3, T4, and T5 were fasted for 10 days and subjected to 4, 5 and 6 weeks resting period respectively. The duration of molting period was 8 weeks. The birds were vaccinated according to prescribed schedule. The data collected during this experiment statistically analysed under Completely Randomized Design by using analysis of variance technique for comparison of means of treatments Least Significant difference test was applied. Body weight of layers in treatment T1, T2, T4 and T5 showed non-significant difference to each other. Treatment T1 layers showed maximum average body weight as compare to other molting treatment at post molt stage. Egg weight, hen day egg production, hen house egg production, bird weight after bleeding, breast weight, thighs weight, abdominal fat and oviduct length showed significant results in all treatments while egg specific gravity, albumen height, Haugh unit score, yolk height, yolk diameter, yolk index, egg shell thickness, feed conversion ratio, liver weight, heart weight, shank weight, gizzard weight and intestine weight showed non-significant differences among all treatments. It is concluded from this study that production performance and egg quality significantly improved in layers by molting with different rest period regimes.

Keywords: Different rest periods, egg quality , induced molting, production performance

Contact Address: Muhammad Yousaf, University of Agriculture Faisalabad, Inst. of Animal and Dairy Sciences, 38400 Faisalabad, Pakistan, e-mail: yousaf@uaf.edu.pk