EFFECT OF LIGHT-EMITTING DIODE (LED) LIGHT COLOR ON TESTICULAR GROWTH, CIRCULATING TESTOSTERONE CONCENTRATION AND SPERM QUALITY IN DANDARAWI ROOSTERS

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Abstract:

ABSTRACT: The current study aimed to evaluate the effects of exposing pre-mature Dandarawi roosters to different light-emitting diode (LED) light colors on testicular development, serum testosterone levels, and sperm motility and velocity. Seventy-five roosters, 16 weeks old, were assigned to 5 experimental groups each with three replicates of five birds per pen. Roosters of each experimental group were subjected to a different light color using Nine-watt red, yellow, green, blue and white LED bulbs from 16 to 36 weeks of age. Twenty-five semen pools were obtained over the last ten weeks (5 pools from each treatment) to evaluate sperm motility and velocity. Blood serum was collected to evaluate testosterone levels and the testicular growth was assessed. The results showed that green light hindered the testicular growth and had adverse effects on almost all studied semen traits (P

Keywords:

Key words: Light color, testicular development, testosterone concentrations, sperm

Published In:

Egypt. Poult. Sci., 38(1), 177-187