PRODUCTION PERFORMANCE OF CAGED LAYERS IN EVAPORATIVE COOLING AND MECHANICAL VENTILATED HOUSING

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Abstract

The study was designed to investigate effect of evaporative cooling and mechanical systems on the performance of caged layers for Konya province of Turkey. Two different treatments were analyzed- evaporative cooling, house - 1 and mechanical ventilation, house - 2 during the summer season of 2005. Inside temperature reduced effectively in house - 1 while higher inside temperatures in house - 2 created a stressful environment for caged layers. The average temperature in house - 1 was as 24.4ºC while it was 27.1ºC in house - 2. The average relative humidity was 52.7% and 40.1% in house - 1 and house - 2, respectively. Average egg production of layers was 1.03% higher in house - 1 than house - 2. The mortality rate in house - 1 and house - 2 was determined to be 0.18% and 0.23%, respectively. The average percentages of cracked eggs in houses - 1 and house - 2 were 1.41% and 0.89%, respectively. The average egg weights were 65.1g and 60.2g in houses 1 and 2, respectively. Daily feed intake of layers in houses - 1 and house - 2 was found as 116.5 g/hen and 103.4 g/hen, respectively.

Key words: evaporative cooling, mortality rate, cracked egg, egg weight