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Light Colour Preference of Broilers Reared in Tropical Environment

D. Senaratna¹, T.Samarakone,² N.S.B.M. Atapattu¹, D.R. Paranawithana¹ and W.C.J.Chandrasiri¹

¹ Faculty of Agriculture, University of Ruhuna

² Faculty of Agriculture, University of Peradeniya

Provision of a “comfortable” colour of light (CL) optimizes the welfare standards of the broilers. The aims of the study were to determine whether broilers have particular preference for CL under tropical environment and to determine such preferences are influenced by the age of the birds and the time of the day. Seven days old chicks (n=6) were randomly assigned to 6 experimental units (1 chick/unit). Experimental units had four rectangular compartments illuminated by incandescent colour light bulbs (5W). Treatments factors were red, blue, green and white (control). CLs arranged in a randomized complete block design. Light intensity was 60 lux during the starter period and 20 lux during finisher period. Artificial light was provided adjusting to 20L:4D lighting schedule. Birds were habituated to the test pen for 16 h in darkness and to the full test situation before allocating to the test pens. Observations were made during morning, evening and night for a total 470 hrs until chicks were 5 weeks old. The presence of bird under the respective CL was recorded at every 15 min. interval (4time/hr.) by adopting scan sampling method. When analyzed for the whole growing period, birds showed no special preference for any CL. However, significant ($P < 0.05$) preferences were observed according to the age and the time of the day. At the 5th week, green (12.36%) was the least significantly ($P < 0.05$) preferred colour to white (19.5%) and blue (40.3%). Meantime at night time green (14.25%) was significantly least preferred to white (31.8%) and red (30.26%). Irrespective of the time of the day, at the 5th week, blue (40.3%) was significantly preferred to green (12.36%) and white (19.58%). It is concluded that light colour preference of broilers is significantly affected by the age of the birds and the time of the day.