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Effects of High Environmental Temperature on the Productive Performance of Thai Indigenous, Thai Indigenous Crossbred and Broiler Chickens

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Abstarc :

The present study was conducted to determine the effect of high environmental temperatures and breed on live productive performances of Thai Indigenous (TIC), Thai Indigenous Crossbred (TICC) and Broilers (BC) Chickens. Twenty four TIC, TICC and BC, one kilogram of weight were used in this study. Chickens were housed in two conditions, i.e., 26±2°C and 38±2°C. At weeks 1, 2, 3 and 4 of experimental period, feed intake, average daily weight gain and feed conversion rate were investigated. The results revealed the following information: At thermoneutral, the productive performances of BC were higher than TICC and TIC ($p<0.05$), respectively. Under heat stress temperatures, the productive performance of the BC was higher than that of the TICC and TICC ($p<0.05$). The productive performance of chickens at thermoneutral was higher than that of chickens under heat stress ($p<0.05$). However, at week 4 the feed conversion rate of the BC was higher than that of the TICC and TIC ($p<0.05$) and high environmental temperatures did not affect the feed conversion rate of TICC ($p>0.05$). The result of the current trials indicates environment temperature and breed influence the productive performance of chickens.

Key Word :
Heat stress, productive performance, Thai indigenous chicken, Thai indigenous chicken crossbred, broiler

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