

# Effects of ambient temperature on productive performances in Tsaiya ducks <sup>(1)</sup>

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## Abstract

The objectives of this study were to investigate the effects of ambient temperature on the productive performances of Tsaiya ducks raised in the artificial climate chamber. A total of 156 ducks were moved to the individual cages in the artificial climate chambers. This study began when ducks were at 39 weeks of age and lasted for 9 weeks. The temperature in the artificial climate chamber was set up at 12°C (low temperature, LT), 22°C (middle temperature, MT) and 32°C (high temperature, HT), respectively. Relative humidity ranged at 80-85% for all treatments. Ducks were exposed to a photoperiod of 16L: 8D and feed and water were provided ad libitum. Body weight, egg production, egg weight and feed intake data were collected. The results showed that HT ducks had lower body weights, egg production and egg weights than those of LT and MT ducks. The HT ducks also had lower feed intake than those in other two groups; and LT ducks had to some degree higher feed intake than that of MT ducks. In the first three weeks of this study, the LT ducks had higher feed conversion ratio (FCR) than the MT and HT ducks. However, feed conversion ratio was similar among treatments after the 5th week. Adverse effects were observed in the ducks exposed to both HT and LT, however, it appeared that ducks were more susceptible to HT than to LT.

Key words: Ambient temperature, Brown Tsaiya duck, Productive performance.

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