THE EFFECT OF POTASSIUM CHLORIDE AND SODIUM BICARBONATE SUPPLEMENTATION ON FEED CONVERSION RATIO AND WEIGHT GAIN OF HEAT STRESSED BROILER CHICKEN

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ABSTRACT

The purpose of this study was to know the effect of potassium chloride and sodium bicarbonate supplementation as thermotolerance agent on feed conversion ratio and weight gain of heat stressed broiler. 30 broiler with 3 weeks ages divide into 5 different groups (n = 6) and separated into two different chamber (A and B). One group (P0) was caged at low temperature (21-23°C) chamber A as a control, while the others (P1; P2; P3; P4) were caged at high temperature (37°C) chamber B. Group P1 administrated only with water, groups P2, P3 and P4 administrated respectively with 1.5 % KCl, 0.5% NaHCO₃, and the combination of both. The result of this study showed there was significantly different both feed conversion rate and weight gain between treatment groups. Supplementaion of 1.5 % KCl, 0.5% NaHCO₃ and the combination of both (P2, P3, and P4) have proven effective to reduce the FCR and increasing weight gain compare with the group that only administrated with water (P1) of heat stressed (37°C) broiler chicken.

Key words: heat stress, weight gain, potassium chloride, sodium bicarbonate, feed conversion ratio