

Effects of a Novel Starter Feed on Growth Performances of Underweight Broiler Chicks

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This study was carried out to evaluate the effects of a novel starter feed for underweight broiler chicks to achieve the expected growth performances and feed conversion ratio (FCR) than the available commercial starter ration. The novel starter feed was formulated with addition of 3% digestible lysine, Bioplex organic mineral and organic acid (Avila Zn) at a rate of 750 g and 330 g per metric tons of feed respectively with other essential amino acids compared to Pussalla Feed Broiler Starter Crumble. The control feed was basically formulated with corn and soya bean meal without addition of organic mineral and organic acid. In this present study, a feeding trail was conducted using underweight (32.48 ± 1.79 g) day old Hubbard Classic chicks (1200) by providing *ad libitum* of two types of starter feed to each 12 groups having 50 birds. The two groups of underweight chicks were fed with two starter feed up to 14 days and the Pussalla Feed Broiler Finisher Pellet was fed on 14-33 days to both groups. Daily feed intake, weekly body weight, FCR and mortality of underweight broiler chicks were recorded during the experimental period. The experimental design was Complete Randomized Design and data were analyzed by using one way ANOVA. Proximate analysis, sugar, starch and metabolizable energy were not different ($p > 0.05$) in two starter rations. The results revealed that the novel starter feed directly influenced to higher weekly weight gain of broiler chicks at 7 and 14 days as 11.70% and 21.95%, respectively while lower FCR at 7 and 14 days as 20.48% and 13.33%, respectively compared with the control group ($p < 0.05$). The novel starter fed chicks had lower ($p < 0.05$) mortality ($3.0 \pm 0.01\%$). Thus, it can be recommended as a solution for low growth performance of underweight chicks and reduction of profit losses of Pussalla Broiler Farm in economically when compared to previous farm records of growth performances.

Keywords: Feed conversion ratio; Feed intake; Growth performance; Starter feed; Underweight chicks