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To investigate the effects of graded levels of probiotic (Protexin) supplementation on production performance: body weight gain, feed consumption and feed conversion ratio in broiler chicks

R.K. Singh, Shiv Bachan, A.K. Singh and S.K.S. Raghuvansi

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ABSTRACT: Poultry enterprise is one of the fastest growing segments of the agricultural sector in India with an average growth rates in egg is 4-6% per annum and broiler production is 10-12% per annum. Enteric diseases are an important concern to the poultry industry because of lost productivity, increased mortality, and the associated contamination of poultry products for human consumption. With increasing concerns about antibiotic resistance, and the ban on subtherapeutic antibiotic usage in many countries, there is increasing interest in finding alternatives to antibiotics for poultry production. The probiotics is are natural alternatives to antibiotics for poultry production. Probiotics include viable microbial and microbial fermentation products which are beneficial to decrease the undesirable microflora population in the gastrointestinal tract of chicks and build-up resistance against diseases by stimulating the immune system. The objectives of this study were to investigate the effects of probiotic (Protexin) on body weight gain, feed consumption and feed conversion ratio in broiler chicks. Total of one hundred eight (108) one-day old broiler chicks of mixed sexes were obtained from a commercial Hatcheries with the average body weight of about 40.9g, were subjected to a 42-day experimental period. The chicks were weighted individually and then randomly divided into four experimental groups; group A as the control group and groups B, C, and D as the treatment group. Each group with the male and female included 3 replicates (9 chicks per replicate). There were 27 birds mixed Male & Female in per treatment group. The probiotic are added in water on the level of 0, 1.0,1.5 and 2.0 g/litre in Group G1, G2, G3 and G4, respectively. All the recommended practices for broiler rearing were followed throughout the experimental period. The results of the present study showed that probiotic supplementation (protexin) did not affect on feed intake, water intake and feed efficiency. The bird mortality did not recorded throughout the experiment. In our experiment we demonstrate statistically non-significant among the treatment group in live body weight and feed efficiency, but slightly increase when probiotic was supplemented. Therefore, when both feed conversion ratio and body weight gain are considered for gaining maximum profit, the supplementation of probiotic may be recommended.

Key Words: Probiotic, broiler chicks, feed conversion ratio.