TRIAL STUDY ON EFFICACY OF PROTEXIN (WATER SOLUBLE) ON PERFORMANCE OF BROILERS

Mohammad Saqib Hamid and Aijazuddin Qureshi,
Hilton Pharma (Pvt) Ltd., Karachi, Pakistan

INTRODUCTION

The interest in application of biotechnology in poultry nutrition has been growing substantially. The commercial rearing conditions of broilers are not always the optimal. Majority of experts consider that environmental and nutritional factors account for almost 85% of the bird performance. One of the most important factors is disease pressure in Pakistan which give rise to measure to over come the negative effects of diseases by indiscriminate use of antimicrobial drugs and vaccines. Biosecurity measures are usually ignored by the farmers.

Worldwide trials of Protexin demonstrated positive effect on three key performance parameters i.e., mortality, weight gain and FCR. Need was felt to determine whether these results could be reciprocated in local farming conditions where the disease challenge is high and management conditions are needed to be improved. Aggressive weather conditions and nutritional factors are also very challenging. This prompted us to institute a series of trials in the varying farm management and climatic conditions. First of the series was initiated at Liaqat Poultry Farm to determine the effects of Protexin (Water soluble) on broilers at dose rate of 1 g per liter in 1st week and then 1 g in 4 liters of drinking water till marketing.

MATERIALS AND METHODS

A 41 days trials, under field conditions at Liaqat Poultry Farm, National Highway, Karachi, Pakistan was conducted from June 15 to July 26, 2000. Protexin W.S. @ 1 g/litre (1st week) and then 1 g/4 litres of drinking water for up to day 41 was used. 250 day-old Hubbard Broiler chicks in each group i.e., treatment and control with three replicates were reared on litter floor. Birds were given Karachi Feed and were kept under identical conditions, in conventional open sided housed. The management, medication, vaccination, breed, feed, water and other parameters were also identical. The house temperature ranged between 28 to 38°C and humidity between 60-68%. The feed and water were provided ad libitum during the experiment.

Mortality was recorded daily. Live weight was recorded weekly of 25% chicks (at random). The control and treated groups were vaccinated against ND, IBD, Hydropericardium diseases as per schedule. The control and treated groups were affected with mild E. coli infection in 1st week, mycoplasma infection from 4th week onward till marketing (day 21-41) and were treated with Enrofloxacin orally for 5 days. The parameters studied were, average live weight gain, feed conversion ratio and mortality.

RESULTS AND DISCUSSION

Results of the study confirmed the positive effects earlier reported. There was marked weight gain, better FCR and low mortality in Protesin treated groups as compared to non-treated control group, as shown in Fig. 1.

The treated groups yielded higher average live weight than control, i.e., 121 g/bird (Fig. 2). Moreover mortality in treated group as compared to control was lesser by 2.4%, while FCR was improved by 0.3 (Fig. 3).

Fig. 1: Graphic presentation of mortality in control and Protesin treated broilers.
CONCLUSION

Protexin WS exhibited significant increase in body weight, improved FCR and reduced mortality.