

## EFFECT OF PORBIOTICS IMMUNOLOGICAL PARAMETERS OF COMMERCIAL BROILER

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### Extended Summary

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The experiment was conducted to investigate the effect of probiotics on physiological and immunological parameters of commercial broilers. About 150 "Cobb-500" strain day old broiler chicks were collected and divided into treatment groups 1 to 5. The chicks of each treatment group were further randomly divided in the form of 3 replications each having 10 birds. The chicks of treatment group 1 to 3 were respectively treated with probiotic-Protexin (Company-Novartis, Dhaka), probiotic-Gutpro (Company-AVON Animal Health, Dhaka), probiotic- Poultry Star Sol (Company- Renata, Dhaka). The chicks of treatment group 4 were given antibiotics and group 5 were maintained an untreated control i.e. no probiotics or antibiotics were utilized in control diet. Treatment group T<sub>1</sub>, T<sub>2</sub>, T<sub>3</sub> and T<sub>4</sub> was significantly higher (P<0.05) feed intake compared to control group T<sub>0</sub>. The CV% and LSD value of feed intake were (3.83) and (105.22), respectively. Significantly higher (P<0.05) body weight was found in T<sub>1</sub> (1401.23g), T<sub>2</sub> (1393.33g), T<sub>3</sub> (1392.17g) and T<sub>4</sub> (1413.34g) as compared with the control T<sub>0</sub> (1346.25g). The CV% and LSD value of body weight were 3.51 and 82.12, respectively. The best feed conversion ratio (Significantly lower, P<0.05, than T<sub>0</sub>) was found in T<sub>4</sub> as compared with treatment T<sub>0</sub>. The feed conversion ratio of T<sub>1</sub>, T<sub>2</sub>, T<sub>3</sub>, T<sub>4</sub> and T<sub>0</sub> were 1.48, 1.49, 1.49, 1.47 and 1.65, respectively. The CV% and LSD value of feed conversion ratio were 4.11 and 0.12, respectively. Treatments T<sub>1</sub> (0.41) and T<sub>4</sub> (0.49) were significantly higher (p<0.05) SP ratio of Newcastle disease than T<sub>2</sub> (0.36), T<sub>3</sub> (0.37) and T<sub>0</sub> (0.15). The CV% and LSD value of SP ratio of Newcastle disease were 30.15 and 0.11, respectively. SP ratio of treatments T<sub>1</sub> (0.30), T<sub>2</sub> (0.29), T<sub>3</sub> (0.29) and T<sub>4</sub> (0.19) were significantly higher (P<0.05) as compared with control T<sub>0</sub> (0.32) for Gumboro disease. The CV% and LSD value of SP ratio of Gumboro disease were 14.28 and 0.08, respectively. Probiotics can be used as effective alternative of antibiotics in the growth performance of broilers.

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