

Effect of Prebiotic, Probiotic and *G-Probiotic SPL*[®] on Certain Haematological parameters in Broiler Chickens

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Abstract

A total of one hundred unsexed, day old and straight run commercial Cobb - 400 broiler chicks were randomly divided in to five groups consisting of twenty chicks in each group. The control group received only the basal diet (Group I) and the treatment groups were administered with prebiotic (Lactose @ 2.5%), probiotic (*Lactobacillus acidophilus* @ 0.1%) and their combination (Lactose @ 2.5% plus *Lactobacillus acidophilus* @ 0.1%) in drinking water, respectively for Group II, Group III and Group IV and commercial product G-Probiotic Spl[®] (containing five species of probiotic organisms, three digestive enzymes and liver extract, @ 0.05 %) in the feed to Group V from day one to 42 to evaluate the hematological parameters in broiler chickens such as total erythrocyte count, hemoglobin content, packed cell volume and total leukocyte count on day 21 and 42 of the experiment. There were non significant ($P>0.05$) differences between different groups on both the days of observation with respect to total erythrocyte count, hemoglobin content and packed cell volume. But, the total leukocyte count in treatment groups significantly ($P<0.05$) differed from control group on day 21 and 42 which may be possibly due to improved immunostimulatory effect and physiological well-being of the birds received prebiotic and probiotic.

Key words: Broiler chickens, Hematology, Prebiotic, Probiotic.