Traditional Eubiotics in Broiler Chicken Production: A Step Towards One Health

R, Niranjani (School: Kendriya Vidyalaya)

Antibiotic resistance is one of the world's top three public health problems (WHO). A major contributing factor to antibiotic resistance is its indiscriminate use in broiler production. This study is aimed to investigate the effect of eubiotics namely panchagavya (modified), Baker’s yeast and dahi (curd) as an alternative to antibiotics on the growth performance of broiler chicks. Day-old broiler chicks were assigned into 5 groups of 20 each namely T1, T2, T3, T4 and T5. The chicks of T1 served as the negative control in which no additive was added to the basal diet. The T2 group served as the positive control and was supplemented with Oxytetracycline @ 0.1g/kg of feed. The other three groups were supplemented with eubiotics: T3 - Panchagavya 7.5 ml/kg of basal diet, T4 - Baker’s yeast 10g per kg of basal diet and T5 - Dahi 10 ml/liter of drinking water. Feed consumption of each group was recorded daily whereas body weight was recorded at weekly intervals for 6 weeks. The average final body weights of chicks were 2051, 2224, 2233, 2342 and 2375 g in the T1, T2, T3, T4 and T5 groups respectively. The mean total feed consumption (g) by the broiler chicks in six weeks was found to be 3700, 3704, 3678, 3712 and 3676 g per bird in groups T1, T2, T3, T4 and T5 respectively. The overall mean feed conversion ratio was 1.85, 1.71, 1.69, 1.62 and 1.58 in the T1, T2, T3, T4 and T5 groups respectively. The supplementation of dahi resulted in the highest body weight and best feed conversion ratio. It is concluded that dahi could be used as an eubiotic feed additive and is a viable alternative to antibiotics to mitigate the development of antibiotic-resistant bacteria.

Awards Won: