

# **Study on Effects of Aloe Vera (Aloe Barbadensis Miller) Supplementation on Growth Performance and Carcass Traits of Broiler**

## **ABSTRACT**

The experiment was conducted at Bismillah poultry farm in Peipur Village, Zakigong Upazila, Sylhet district, using 90-day-old chicks of the "Lohman strain" commercial broilers. The objective was to investigate the impact of Aloe vera supplementation on various aspects of broiler performance, including growth, feed conversion ratio, carcass yield, and physicochemical properties of the meat. Ninety chicks were allocated and randomly assigned to four treatment groups and a control group, with each group replicated three times and consisting of six broilers per replication. Aloe vera gel was incorporated into the diets at four different concentrations: 0.1% in T1, 0.2% in T2, 0.3% in T3, and 0.4% in T4. The control group (T0) was not administered any Aloe vera supplementation. The results of the experiment showed that broilers in the T4 group, which received 0.4% Aloe vera gel in their diets, exhibited a significant increase in feed consumption compared to the other groups ( $p < 0.05$ ). These birds also demonstrated significantly higher body weight gain ( $p < 0.05$ ) than the other groups. Additionally, the T4 group had a significantly lower feed conversion ratio ( $p < 0.05$ ) compared to the other groups. Based on these findings, it can be concluded that the application of Aloe vera gel enhances broiler production. The Aloe vera-induced treatments (T1, T2, T3, and T4) resulted in greater body weight gain and improved feed conversion ratio compared to the control group. Therefore, it is recommended to use Aloe vera gel to enhance the meat production performance and improve the carcass of the broiler.