

Garlic extract supplementation on the performance of crossbred calves

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Keeping in view the greatly renewed interest in developing natural supplements like garlic extract to maintain animal performance and welfare, the present study was conducted on crossbred calves at their pre-ruminant stage to see the effects of feeding garlic extract on their performance. Twelve calves (Holstein cross) in their pre-ruminant stage were randomly allotted into treatment and control groups in equal number at Dairy Cattle Farm of National Dairy Research Institute, Haryana. Performance was evaluated by measuring average body weight (BW) gain, feed intake [dry matter (DM); total digestible nutrient (TDN) and crude protein (CP)], feed conversion efficiency (DM, TDN and CP), fecal score, fecal coliform count, feed cost/ calf/day and feed cost/ kg gain in body weight. Diets were same for the both the groups. In addition, treatment group received garlic extract supplementation @ 250 mg/kg BW/day/calf. Body weight measured weekly, feed intake measured twice daily, proximate analysis of feeds and fodders analyzed weekly, fecal scores monitored daily and fecal coliform count done weekly. There was significant ($P < 0.01$) increase in average body weight gain and feed intake and significant ($P < 0.01$) decrease in severity of scours as measured by fecal score in the treatment group compared to the control group. The mean feed cost (Rs.)/calf/day in treatment and control groups were 55.01 ± 0.81 and 45.29 ± 0.91 respectively and they differ significantly ($P < 0.01$). The mean feed cost (Rs.)/kg body weight gain in treatment and control groups were 159.23 ± 18.02 and 240.97 ± 16.04 respectively but they did not differ significantly which might be due to small number of experimental animals. The results suggest that garlic extract can be supplemented to the calves for better performance.

Biography

Sudipta Ghosh has completed his Ph.D at the age of 30 years from National Dairy Research Institute, Karnal, Haryana, India. He is working as Associate Professor/Technical Officer,

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