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News

Fermented Tchoukoutou had a Beneficial Effect on the Growth Performance of Local Guinea Fowl.

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Antibiotics are a type of anti-microbial agent that suppress the growth of bacteria. Since antibiotic usage in the poultry and swine industries has been curtailed due to concerns about antimicrobial resistance, public health has been affected. Alternatives to traditional antibiotics include fermented Tchoukoutou containing probiotic bacteria such as *Lactobacillus casei, Lactobacillus fermentum, Lactobacillus acidophilus*, and *Enterococcus faecium*. In previous investigations, fermented chukuto was used as a feed supplement in the diets of broilers, fish, and rabbits, and the findings were encouraging. Therefore, the objective of the current study was to assess how fermented Tchoukoutou affected the productivity of both domestic and foreign guinea fowl.

A scale was used to weigh the birds, and those with similar weights were assigned at random to 3 experimental treatments. A completely randomized approach was used to divide each treatment into 5 replicates, each containing 25 birds. In this study, probiotic bacteria from four different species—*Lactobacillus casei, Lactobacillus fermentum, Lactobacillus acidophilus*, and *Enterococcus faecium*—were added to a meal made from fermented Tchoukoutou and traditional "kpètè-kpètè" (fermented) food. Ad libitum supplies of food and water were given, and a lighting schedule of 23L: 1D was used. The effect of fermented Tchoukoutou on the production performance of local and exotic guinea fowl was analysed using one-way ANOVA.

The therapy had no discernible impact on the daily weight growth of the growing guinea fowl in the area. In native guinea fowl, the R_1 group's starting phase feed cost was considerably (p 0.05) lower than that of the other groups. This study's goal was to determine whether adding fermented Tchoukoutou to feed would improve the performance of both domestic and foreign guinea hens (Numida meleagris) in terms of production without the use of antibiotics. In comparison to R_2 and R_3groups, the R_1group of local guinea fowl experienced an increase in body weight during the starter phase after receiving a diet containing 3% fermented Tchoukoutou. The improvement in feed efficiency caused by probiotics may potentially account for this finding.

The current study's findings demonstrated that the native guinea fowl, particularly during the starter phase, benefited significantly more from the meal containing probiotic bacteria produced from fermented Tchoukoutou than the alien guinea fowl. Increases in body weight, daily weight gain, and

feed efficiency ratio were seen after adding % fermented Tchoukoutou to the diet of both domestic and foreign guinea fowl.

JOURNAL REFERENCE

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KEYWORDS

Probiotic, antibiotics, guinea fowl, growth performance, livestock production