Responses of choice-fed red jungle fowl and commercial broiler chickens offered a complete diet, corn and soybean

ABSTRACT

Equal number of red jungle fowl (JF) and commercial broiler chickens (CB), raised in battery cages, were provided a single complete diet (control) or a choice of a complete diet, ground corn and ground soybean from 21 to 56 days of age. There were significant genotype x feeding regimen interactions for several traits measured suggesting CB and JF responded differently to the two feeding regimens. The single fed CB had better growth and feed conversion ratios (FCR) than those under choice feeding. However, the body weight and FCR of JF were not affected by feeding regimen. While the single fed and choice-fed JF consumed similar amount of protein during days 21 to 55, the protein intake of the choice-fed CB was lower than the control. From days 21 to 55, irrespective of genotype, choice-fed chicks consumed less energy than their single fed counterparts. Regardless of genotype, the trend in the proportion of each feed consumed was similar with complete diet>corn>soybean. In conclusion, while choice-fed JF were capable to select nutrient necessary for maximum growth, choice feeding was detrimental to growth and feed conversion ratio in CB.

Keyword: Broiler chickens; Choice feeding; Growth performance; Jungle fowl