

## ABSTRACT

Ninety-six KALRO improved chicken (KIC) aged 8 weeks were used to study the effect of feeding diets incorporated with different levels of ground *Prosopis juliflora* pods (GPJP) on growth performance. A commercial grower feed, without GPJP, was used as the control diet. Experimental diets were formulated by replacing the commercial diet with GPJP at 0% (T1), 10% (T2), 20% (T3) and 30 % (T4). Feed intake and live weight gains were monitored for eleven weeks and used to calculate feed conversion efficiency (FCE). Two birds from each pen were slaughtered to determine carcass weight. Feed intake and live weight gain for chicken offered T4 reduced significantly ( $p<0.05$ ) compared to chicken offered all the other diets. Pullets offered T4 diet had a significantly ( $p<0.05$ ) higher FCR than cockerels on the same diet. Each treatment had a significant ( $p<0.05$ ) difference in dressed cold weight (DCW), eviscerated weight (EW) and leg weight (LW) in cockerels. T4 had significantly ( $p<0.05$ ) lower weights for DCW, EW and LW in pullets. Diets with 20% and 30 % of GPJP were the least cost diets for pullets and cockerels respectively. Findings showed that GPJP can be included at the level of 20% for both pullets and cockerels diets without affecting performance at the least cost. Cockerels in this study utilized higher levels of GPJP in the diet more efficiently than the pullets. Key words: Carcass weight, feed conversion efficiency, feed intake, KARLO improved chicken *Prosopis juliflora* pods, Performance.