There was slightly information about the utilization of gedi leaves as feedstuff in broiler and whether their inclusion as a solid herb material would have growth promoting effects birds. So. there is need therefore to investigate the effect of these unconventional feed on the performance characteristics of broiler. The objective of this research was to the nutrient utilization and digestibility of gedi (*Abelmoschus manihot* (L.) Medik) in diet for exploring the potential of this plant as a herb plant for a candidate of poultry feed.

MATERIALS AND METHODS

The harvested gedi leaves were air dried in shade under a shed until they were crispy to while retaining their greenish colouration. The leaves were then milled to obtain a product leaf meal (GLM). Chemical analysis was also performed to determine the phytochemical contents of gedi leaves.

In this experiment, 16 broiler chicks Cobb-CP 707 35 days of age were utilized for of apparent metabolizable energy and apparent metabolizable energy corrected for (AME and AMEn, respectively), crude protein and crude fibre digestibility, through the total excretion collection method. Based diet was commercial complete based diet and treatments were basal diet (R0), 95% basal diet + 5% gedi leaves meal =GLM (R1), 90% diet + 10% GLM (R2), and 85% basal diet + 15% GLM (R3). The experimental diets were iso-protein and iso-calory, contained 22% CP and 2900 Kcal ME/kg. The experimental was of 7 days: three for birds to adapt to cages, diets and management, one for fasting for total excreta collection. The experimental design was completely randomized, with ents and four replicates of one bird. Chicks were raised in metabolic cages fitted with for quantitative feeding and faecal collection. The excreta of all experimental units collected daily on trays covered with plastic. The collected excreta were sprayed by 5% boric to prevent any loss in ammonia, then dried in an oven at 55 0C for 24 hours, then weighed. finely ground and kept for chemical analysis according to AOAC (1990) methods.

The data were used to calculate apparent metabolizable energy (AME), apparent metabolizable corrected for nitrogen (AMEn) values according to the following formula (Zarei, 2006),

1. AME = [(Fi x GEf) - (E x GEe)] / Fi
2. AMEn = [(Fi x GEf) - (E x GEe) - (NR x K)] / Fi

AME Apparent Metabolizable Energy (kcal/gm)
AMEn Apparent Metabolizable Energy corrected for nitrogen (kcal/gm)
Fi Feed intake (gm)
E Excreta (gm)
GEf Gross Energy of feed sample (kcal/gm)
GEe Gross Energy of excreta (kcal/gm)
NR NR = (Fi x Nf) - (E x Ne) Nitrogen Retention (gm)
Nf Feed Nitrogen (%)
Ne Faecal Nitrogen (%)
NRO Nitrogen Retention at zero level for control group (gm)
K Nitrogen Retention corrected coefficient (8.73kcal/gm for each gm N)

The digestibility values for crude protein (CP) and crude fibre (CF) were calculated as nutrient minus nutrient excreted divided by nutrient intake multiplied by hundred (McDonald *et al.*, with equations as follow:

$$\text{Apparent Nutrient Digestibility} = \frac{\text{Total Intake x \% Nutrient Intake} - \text{Total Output x \% Nutrient Output}}{\text{Total Intake x\% CP Intake}} \times \frac{100}{1}$$