



Influence of Crop Residues as Major Fibre Sources in Diets on Growth Indices of Rabbits



*Taofeek Adesoji Adeosun And Okhiomah Abu

*Federal College of Education (Tech.) Bichi, Kano State, Nigeria

University of Ibadan, Ibadan, Nigeria

*email:adeosuntaofeekadesoji@yahoo.com

INTRODUCTION

- ✓ High cost and scarcity of conventional fibre sources persist in Nigeria
- ✓ Inadequate animal protein consumption by Nigerians can be ameliorated by incorporating non-conventional fibre sources into rabbit diet. (Bawa *et al*, 2008)
- ✓ Crop residues like corn cob and rice straw are examples of non-conventional fibre sources, always cheap and readily available in Nigeria

OBJECTIVES

- ✓ To determine the growth performance, carcass characteristics and economic of production of rabbit fed maize offal replaced with corn cob and rice straw based diet.

MATERIALS & METHODS

- ✓ Experimental Site: Rabbitry Unit, Teaching and Research Farm, University of Ibadan, Nigeria.
- ✓ Experimental Animals: 84 growing rabbits bucks of mixed breeds (New Zealand White X Chinchilla X Dutch) weighing averagely 794 g were used for the trial.
- ✓ Experimental Diet Layout

Control (30% MO)	10% CC	20% CC	30% CC	10% RS	20% RS	30% RS
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- ✓ Growth parameters and carcass characteristics were measured
- ✓ Experimental Design: Completely Randomised Design



Maize Offal



Corn Cob



Rice Straw

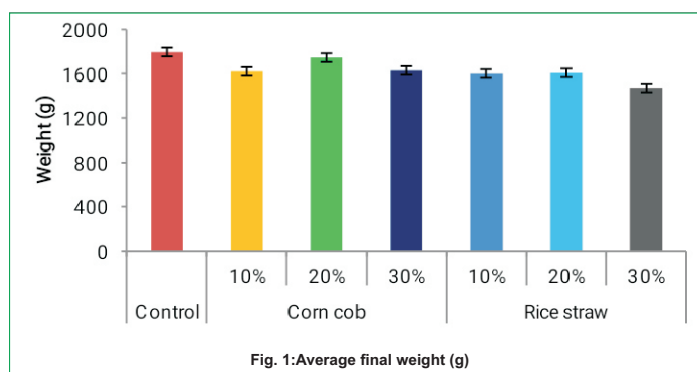


Fig. 1: Average final weight (g)

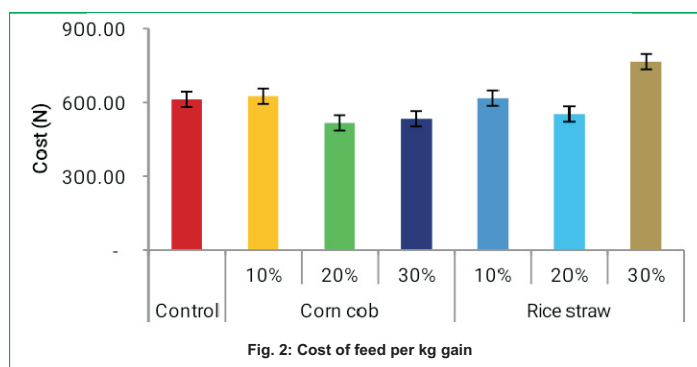


Fig. 2: Cost of feed per kg gain

Table 1: Carcass Characteristics of the Growing Rabbits fed Corn Cob and Rice Straw - based diets

Parameter	Control	CC Diet			RS Diet			P
		10	20	30	10	20	30	
Live wt.(g)	(1586.50±58.73)	(1500.50±242.07)	(1671.00±170.66)	(1584.00±58.31)	(1536.25±111.40)	(1514.50±85.72)	(1345.00±29.51)	0.1137
Carcass Wt.(g)	(1542.00±961.64) _a	(1462.50±237.63) _a	(1629.27±161.64) _a	(1546.50±64.01) _a	(1501±106.15) _a	(451.50±84.83) _a	(1242.5±101.28) _b	0.047
Dressing %	(55.44±4.27)	(59.27±7.28)	(58.70±8.68)	(50.10±2.37)	(51.40±1.91)	(53.98±0.89)	(51.37±2.15)	0.1779

RESULTS & DISCUSSION

- ✓ There were no significant differences in all the growth parameters taken
- ✓ Lowest feed cost per kilogram gain and the best average final weight in all the treatments with varying levels of corn cob and rice straw meals
- ✓ Carcass weight was significantly ($P < 0.05$) higher in 20% CC than 30% RS
- ✓ Differences in corn cob and rice straw utilization by rabbits could be attributed to the differences in the nature of the fibre sources as posited by Alawa and Amadi (1991).

CONCLUSION & OUTLOOK

- ✓ Corn cob and rice straw are good sources of fibre in rabbit diet
- ✓ Maize offal can be replaced by corn cob up to 67% in rabbit diet with reduction in production cost.
- ✓ Supplementing non-conventional fibre sources in rabbit diets with enzymes, probiotics and organic acid might facilitate better utilisation