



Performance of Weaned Rabbit Bucks Fed Graded Levels of African Yam bean in Cassava Peel Meal –Based Diets

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Introduction

The high cost of conventional feed ingredients has reduced the affordability of animal products. This has led to research into the use of alternative feed resources including Cassava (*Manihot esculenta* Crantz) and African yam bean (*Sphenostylis stenocarpa* Harms).

Objective

This study evaluated the effect of cassava peel meal supplemented with graded levels of African yam bean on the performance of weaned rabbit bucks.

Materials & Methods

Location of study: Rabbitry unit of the Federal College of Animal Health and Production Technology, Moor Plantation, IAR&T, Ibadan, Nigeria.

Experimental materials: Cassava peel meal (CPM) and African yam bean (AYB).

40, crossbred 5-6 week old bucks

Four treatments: 0, 10, 20 or 30%AYM were supplemented into 25% CPM.

Study period: 12weeks (84 days)...

Parameter measured: Growth, blood profile and economics of production.

Data Analysis: One-way ANOVA in CRD

Results

Table 1. Growth performance

Parameters	0%AYB T ₁	10%AYB T ₂	20%AYB T ₃	30%AYB T ₄	SEM
Initial weight (g)	635.30	635.00	634.00	635.00	15.43
Final weight (g)	1361.40 ^a	1391.20 ^a	1379.70 ^a	1276.40 ^b	32.42
Total weight Gain (g)	726.10 ^b	756.20 ^a	744.40 ^a	641.40 ^c	30.52
Ave. wkly wt. gain(g)	60.51 ^a	63.02 ^a	62.06 ^a	53.45 ^b	4.36
Total Feed intake(g)	3050.20	2923.70	2933.16	2918.50	50.61
Ave. wkly feed intake (g)	254.18	243.64	244.43	243.21	4.21
Feed Conversion Ratio	4.20 ^a	3.87 ^b	3.84 ^b	4.55 ^a	0.17
Mortality (%)	10	10	0	20	

Table 2. Economics of production

PARAMETERS	0% AYB T ₁	10 %AYB T ₂	20% AYB T ₃	30% AYB T ₄	SEM
Cost per 100 Kg diet (₦)	6,564.50 ^a	6,132.00 ^b	5,255.50 ^b	4,450.50 ^c	110.8 ³
Cost per kg diet (₦)	65.65 ^a	61.32 ^a	52.56 ^b	44.51 ^c	1.11
Total Feed consumed/rabbit (kg)	2.93	2.82	2.93	2.33	0.12
Total Cost of Feed/ rabbit (₦)	192.35 ^a	172.92 ^a	154.00 ^b	103.70 ^c	2.02
Feed Conversion Ratio	4.20 ^a	3.87 ^b	3.84 ^b	4.55 ^a	0.17
Feed Cost/kg weight gain (₦)	275.73 ^a	237.31 ^b	201.83 ^c	202.52 ^c	4.32

Conclusion

Up to 20% AYB meal maintains the growth performance, carcass characteristics and cost of rabbit production.

