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PRELIMINARY PERFORMANCE DATA FROM A RABBITRY IN TRINIDAD, W.I.

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SUMMARY

This paper presents preliminary summary of the data available from one small rabbitry in Trinidad. Local rabbits of mixed breeding were housed in modern wire cages and fed pig grower pelleted ration (16% CP) and grass. Growth performance was found to be about half of that achieved in temperate countries with improved breeds utilizing properly balanced rabbit diet. High mortality of kits and lower levels of doe/buck fertility are other problem areas.

Introduction

With ever increasing cost of imported concentrated feeds in the Caribbean region, we will have to rely more and more on those domestic meat animals which can optimize the use of available forages. Rabbits are ideally suited in this regard and can make an important contribution to the family diet in many developing countries. Many authors have discussed the potential of rabbits as meat producers (Owen et al., 1977; Cheeke, 1979, etc.). Rastogi (1980 and 1982) discussed the potential contribution of rabbits in the Trinidad context and suggested that rabbit production could be profitably integrated with small farmer production systems. Rastogi also suggested that strong Government support was necessary to exploit this potential fully. However, lack of locally generated information on housing, feeding, management, health, and performance of rabbits serves as a disincentive for governments to take a policy decision on rabbit production. This problem is further compounded due to lack of trained personnel and proper extension material.

With a view to gaining some insight into various aspects of rabbit production, we started a rabbitry at the University Field Station in March, 1983 with the purchase of two does

and one buck from a pet keeper. Purchase of the breeding stock continued until we exhausted most of the supply sources within our reach. Currently, there are ten breeding does, four bucks, followers and replacement stock.

This paper is the first attempt to summarize the available performance data.

Materials and Methods

The data was collected from a total of 10 does producing 28 litters. Animals were of mixed breeding including mainly all whites, one spotted, one brown, and one solid black doe. These animals were purchased mostly from pet keepers and a few from small rabbitries and represented as wide a genetic foundation as possible.

Does and bucks were housed individually in modern, all wire cages which were imported from France in kit form and assembled here. The doe cage had a built-in nest box. Each litter was fattened as a group. The rabbitry was located under an old dairy barn shed which was shaded from the east but exposed to heat from the afternoon sun. Peak daily temperature inside the rabbitry could reach as high as 32°C. There was good ventilation and hardly any odour of ammonia.

Rabbits were fed in the morning with Pig Grower pelleted ration (16%

crude protein, 3.5% crude fat, and 6% crude fiber) and any type of available grass, or farm vegetable waste. Feeding schedule for concentrate pellets is given below:

	<u>daily /head</u> (g)
Dry & Pregnant does, buck	80
Lactating doe:	
During 1st wk.	120
During 2nd-4th wk.	80+10 per kit
Fattening:	
During 1st wk.	20
then gradually increase to 60g over the next 7-8 wks.	

Water was available continuously through automatic waterers. Rabbits were fed every Friday afternoon for the following Saturday and Sunday. Thus, the rabbitry was unattended over the weekend.

Does were mated 11 days post kindling, and mating was restricted to Thursdays before 07h30. Kindling thus occurred over the weekend. Weaning was done on Mondays and manure removal every Friday.

Results and Discussion

The means are presented in Table 1 for various reproductive, growth and carcass traits. Considering the type of stock, small mature weight and the feeding system with which we started, our performance results are generally satisfactory and compare favourably with results obtained under similar tropical conditions elsewhere (Mgheni, 1978; Owen, 1978; Omole, 1982). However, compared to results obtained in temperate countries, growth performance (as well as concentrate feed consumption) of our rabbits is just about half. An economic consequence of this is that it takes unusually long (4.8 months) to reach the acceptable slaughter weight of 2 kg. Moreover, after 3 months of age, growth rate begins to decline thus reducing efficiency of

feed conversion. As a consequence of poor growth performance, requirements for fattening cages is increased which impacts on the floor space in the rabbitry.

On the reproduction side, major problems are perinatal and preweaning mortality, and difficulty in breeding the does.

It is apparent from our results that a ration containing 16% crude protein (and which is not balanced for nutrient needs of rabbits) is not adequate to satisfy growth as well as reproduction requirements. The work of Omole (1982) seemed to suggest that otherwise balanced diets containing 18% protein may be adequate for growth, while diets containing 18-22% protein may be desirable for efficient reproduction. We have had some experience that supported Omole's observations. Accordingly, we briefly tried broiler finisher pellets containing 18% protein (and much better balanced to rabbit nutrient needs than pig grower pellets). While growth was superior, feed wastage was high (20%).

Our systems of feeding was not designed to fully exploit the genetic potential of animals. Rather, we made use of what was available. These results will be more applicable to the backyard system of production. There is ample scope for improving animal performance in several ways.

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Table 1: Preliminary Rabbit Performance Data at The University Field Station in Trinidad

Trait	Mean
<u>Reproduction:</u>	
(n=10 ^{oo} 28 litters) ++	
Total kits born/litter	6.68
Live kits born/litter	6.18
Kits weaned/litter	5.56
Perinatal mortality (%)	7.5
Perweaning mortality at 28d(%)	10.0
Age at 1st kindling (mth.)	7.0
<u>Growth (g):</u>	
Av. kit wt. at:	
Birth	46.6
Weaning (28d)	331
6 weeks	564
8 weeks	833
10 weeks	1158
Av. daily gain during:	
0-4 weeks	10.2
5-6 weeks	16.6
7-8 weeks	19.2
9-10 weeks	23.2
Mature body wt. (^{oo}) ++	2734
<u>Carcass:</u>	
Slaughter age at .2 kg. liveweight (mth.)	4.8
Dressing (%)	51.9

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