

## Effect of Weaning at Different age intervals on the growth rate of Broiler Rabbits

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### Abstract

Fifty broiler rabbit business were divided into five groups based on their age at weaning (3,4,5,6 and 8 weeks of weaning as group I, group II, group III, group IV and group V respectively). The average daily gain in the given group was 17.71, 18.64, 19.00, 20.86 and 21.07 gm/day respectively at the end of 12 week of the study. It was inferred that the difference was non-significant and also no significant difference was observed between the sex.

**Keywords:** Growth rate, Weaning, Average Daily Gain, Broiler Rabbit.

### Introduction

Rabbits are considered to be the ideal meat producing micro-livestock species owing to various advantageous attributes they poses. The short generation interval, high productivity, less capital investment and good quality, low cholesterol meat, are some of the features, above all they best suit to either large scale or small scale/backyard production. But the potential of the species has not been exploited completely. Researchers regarding their management are only few considering this aspect, early weaning of business to increase the productivity is considered in the present study.

### Materials and Methods

Fifty broiler rabbit business were selected randomly from different does and divided into 5 groups of 10 animals (5 male and 5 female) each on the basis of weaning age and allotted randomly. The group I was weaned at 3 week of age, group II at 4 week, group III at 5 week, group IV at 6 week and group V at 8 week of age. The duration of the experiment was for 12 week, as the broiler rabbits are marketed for slaughter at this age (Gulyani, et.al.2000).

The business were fed grass (Rhodes and Guinea grass) and concentrate mixture which was prepared as per details given in Table-1 using various feed ingredients. This was fed ad libitum. The Dry matter Intake (DMI) and weekly body weight were recorded during the experiment period. Weight of the animals was taken weekly.

The data obtained for growth rate was analyzed statistically (one way analysis of variance) as per the methods described by Snedecor and Cochran (1980).

Table-1. Percent Ingredient composition of concentrate mixture.

Ingredients	% Composition
Maize	40
Wheat Bran	37
Ground Nut Cake	20
Mineral Mixture	2
Common Salt	1

### Results and Discussion

The average daily weight gain in the 5 experimental groups was not affected by the weaning age. The results are given in Table-2, Table-3 and Table-4.

Results revealed no significant difference between the groups. The results are similar to the findings of Chen, et.al.(1978) and De Blas, et.al.(1981) who reported that weaning age had no significant influence on weight gain at 12 week of age. The comparison between sex within each group also revealed that the sex had no significant influence on the weight gain in rabbit. This was in accordance with the findings of De Blas, et.al.(1981).

From the present findings, it can be concluded that rabbits can be weaned at as early as 3 week of age without affecting the post-weaning live weight gain.

### References

1. Chen C.P., Rao D.R., Sunki G.R. And Jhonson, W.M.(1978): Effect of Weaning and slaughter age s upon rabbit meat production. J. Animal Sciences. 46:573-577.
2. De Blas J.C., Perez E., Maria J. Fraga, Rodriguez, J.M. and Galvez J.F. (1981): Effect of diet on feed intake and growth of rabbits from weaning to slaughter to different age and weight. J. Animal Sciences. 52:1225-1232.

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3. Gulyani R., et.al.(2000): Performance of broiler rabbits in the in the semi-arid region of India. In: Compendium on Proc.Int. Conference on Small Holder Livestock Production Systems in Developing countries
4. Opportunities and Challenges, Thrissur, Kerala, 1:71-77. Snedecor, G.W. And Cochran, W.G.(1980): Statistical Methods, 7th Edn. Oxford and IBHPublishing Co., Calcutta.

Table-2. Average Daily weight gain in Rabbits of various groups.

Groups	Average Daily Weight Gain (gm/day)	Critical Difference Values
I	17.71 ± 1.16 <sup>NS</sup>	4.328
II	18.64 ± 2.18 <sup>NS</sup>	4.328
III	19.00 ± 1.58 <sup>NS</sup>	4.328
IV	20.86 ± 1.47 <sup>NS</sup>	4.328
V	21.07 ± 0.88 <sup>NS</sup>	4.328

Table-3. Average Daily weight gain in Male Rabbits of various groups.

Groups	Average Daily Weight Gain (gm/day)	Critical Difference Values
I	16.57 ± 1.90 <sup>NS</sup>	5.947
II	17.00 ± 2.52 <sup>NS</sup>	5.947
III	16.86 ± 2.11 <sup>NS</sup>	5.947
IV	19.00 ± 2.30 <sup>NS</sup>	5.947
V	22.57 ± 0.47 <sup>NS</sup>	5.947

Table-4. Average Daily weight gain in Female Rabbits of various groups.

Groups	Average Daily Weight Gain (gm/day)	Critical Difference Values
I	18.86 ± 1.34 <sup>NS</sup>	6.569
II	20.28 ± 3.70 <sup>NS</sup>	6.569
III	21.14 ± 2.10 <sup>NS</sup>	6.569
IV	22.72 ± 1.55 <sup>NS</sup>	6.569
V	22.00 ± 1.56 <sup>NS</sup>	6.569

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