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Influence of some management practices on rearing of Guinea Pigs

Thesis presented

by

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(B.V.Sc) Cairo University (2013)

For the Degree of

Master in Veterinary Medicine Science
(Animal and Poultry Behaviour and Management)

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Abstract

This study was conducted on three separate experiments. In the first experiment, the influence of different types of feed on the performance of guinea pigs; a total number of 60 G. pigs were used and allocated into 12 cages each of 5 G. pigs/ cage. The cages (12) were divided into 4 groups, the 1st group fed on commercial rabbit diet (C.R.D), the 2nd fed on alfalfa hay (A.H), the 3rd fed on commercial rabbit diet and alfalfa hay (C.R.H) and the 4th fed on national research council ration (N.R.C) formed manually based on requirements of G. pigs. The results revealed that G. pigs fed on (N.R.C) ration had the highest body weight of adult G. pigs, pregnant sows and litter size as well as the average live birth weight which reflect on their mortality. While (Commercial rabbit diet + Alfalfa hay) group recorded the highest body weight for young G. pigs. Regarding the economic point of view in relation to weight gain (Alfalfa hay) group revealed the highest value for adult and (NRC) group for young. The second experiment was conducted to investigate the effect of different types of bedding material on the behaviour and performance of guinea pigs, a number of 30 G. pigs were used in this experiment. Animals were divided into 2 groups. Each group was represented by 3 cages. The 1st group was housed on straw and 2nd group was housed on coarse wood shavings. The results showed that G. pigs reared on straw bedding recorded higher duration in feeding behaviour and body weight than those reared on wood shavings and this may contributed to G. pigs' consumption of straw as a part of their feeding regime, which lead to increase their body weight. The third experiment was conducted to study the influence of environmental enrichment on the behaviour and welfare of guinea pigs, a number of 30 G. pigs were used in this experiment. Animals were divided into 2 groups. Each group was represented by 3 cages, results revealed that involvement of polyvinyl chloride tube (PVC tube) as a sort of physical enrichment in their environment was beneficial for their welfare and this expressed by increasing in their feeding duration and percent which reflected on their body weight.

Key words: guinea pig – cavy porcellus – behaviour – nutrition – enrichment - bedding materials – husbandry.

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